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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 315 **October, 1986**

Business in Virginia September, 1986 Data

Virginia's economic indicators showed lower growth rates this September than in September 1985. The one exception was bank debits, the dollar amount of checks cleared by banks in the State's urban areas, which rose by 27.0 percent from September 85 to September 86, compared to a 15.6 percent gain during the previous twelve months. All other September indicators recorded lower growth this year compared to the growth rates in September 1985: building permits, electricity consumed, newspaper advertising linage, new car registrations, water consumed, and our retail sales sample.

Slower growth does not neceessarily mean low growth. For example, new car registrations in September jumped to 19.5 percent above the same month last year, in response to the exceptional financial terms offered by dealers. That did raise new car sales to an extraordinary level. However, in September 1985 the response to special promotions was a 31.0 percent increase, not only a higher growth rate but a larger increase in the number of cars sold. Even so, this September's 19.5 percent gain is a very high growth rate, one which indicates a substantial amount of borrowing from future car sales. That growth rate is over four times as large as the real (inflation-adjusted) rate of growth in Virginia's personal income, so that pace of new car buying is not sustainable in future months.

In some key sectors, the slower growth is low growth, or no growth at all. For example, building permits in Virginia's urban areas fell 7.6 percent in September compared to a year ago. That follows a 4.8 percent decline in August. The exceptional building boom experienced since 1982 in Virginia (discussed in last month's issue) appears to have passed its peak. Look for further decreases statewide and in more cities, in the months ahead.

Our sample of retail stores reported a 3.7 percent increase in sales per store in September. That is below the year-over-year increase of 6.5 percent in July and 5.3 percent in August. The growth in the State's total taxable sales also slowed to less than ten percent in July and August, when the taxable sales gains were 7.0 percent and 5.1 percent, respectively.

A broader review of 1986 also confirms that Virginia's economic growth is slowing down, as expected. The Federal government now has released the state's personal income statistics for the second quarter of 1986. These data show Virginia's personal income for the first half of 1986 was 7.1 percent higher than in the first half of 1985. Good growth, but below the 8.4 percent growth rate achieved for calendar year 1985. That slower growth in personal income is continuing, and it foreshadows slower growth in retail sales and construction. Taxable sales in the first six months of 1986 were up 10.6 percent compared to the first half of 1985, a growth rate well above the growth in Virginia's income. Retail trade growth did slow down in Virginia in the third quarter. Fourth quarter gains also are likely to be under ten percent, more in line with income growth.

Looking to our cumulative data in Table III, covering the first nine months of 1986 compared to the same period in 1985 (first eight months for the two lagged series, nonagricultural employment and taxable sales), only four series showed higher year-to-date growth in 1986 than in 1985. Those were building permits, up a cumulative 23.8 percent this year compared to 5.3 percent last year; electricity consumed, up 8.4 percent versus 4.0 percent; water consumed, up 5.2 percent versus 4.3 percent; and bank debits, up 22.9 percent compared to 5.0 percent. Electricity and water consumption growth rates have reflected the building boom as well as a rebound in Virginia manufacturing activity, and bank debits certainly have been influenced by the construction boom and high growth in consumer durable good purchases. With lower employment and income growth, slower

Chart I

Nine Selected Business & Economic Indicators Percentage Change

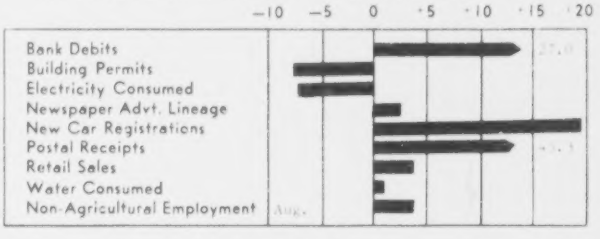
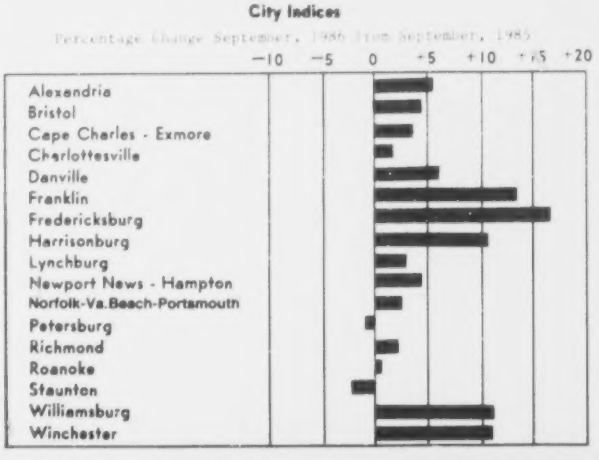


Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS
FOR 17 CITIES

TABLE I — September 1986

Monthly Data Seasonally Unadjusted Except Where Noted
Latest Month or Period Shown: September 1986

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER LINAGE	NEW CAR REGISTRATIONS	August NON-AGRICULTURAL EMPLOYMENT†	WATER CONSUMED	RETAIL SALES ‡	POSTAL RECEIPTS
The State		329.5	178.1	137.0	306.0	44.9	110.9	94.4	100.6	123.0
Alexandria	199.4	331.4	168.2	190.9	N.A.	14.2	106.3	92.1	263.7	N.A.
Bristol	94.2	N.A.	82.5	90.2	77.8	132.9	108.8	129.5	110.8	100.2
Cape Charles - Exmore	135.8	N.A.	206.2	125.6	N.A.	129.5	N.A.	N.A.	130.9	189.4
Charlottesville	139.1	311.8	229.0	143.2	N.A.	150.1	101.7	126.6	249.1	103.1
Danville	78.9	N.A.	83.6	115.4	117.8	94.3	82.9	N.A.	122.9	92.9
Franklin	164.6	N.A.	148.1	153.8	117.8	208.4	95.0	109.0	111.4	206.7
Fredericksburg	101.6	92.6	93.7	N.A.	133.6	242.4	N.A.	94.9	188.8	77.6
Harrisonburg	203.2	416.3	349.3	N.A.	127.7	128.0	N.A.	108.2	253.8	66.6
Lynchburg	99.7	97.1	123.8	121.7	N.A.	146.1	98.8	115.0	121.4	87.1
Newport News - Hampton	149.8	N.A.	470.0	128.7	91.9	148.1	110.4	133.4	186.8	N.A.
Norfolk - Va. Beach - Portsmouth	115.4	117.5	205.3	143.7	88.8	144.1		92.0	145.4	N.A.
Petersburg	138.3	261.2	308.4	N.A.	28.2	116.3		86.2	112.1	213.6
Richmond	193.4	416.1	182.0	148.8	116.9	168.6	100.0	114.6	201.1	470.5
Roanoke	176.2	448.0	92.0	203.0	165.4	114.2	111....	99.8	228.8	199.1
Staunton	141.9	116.0	321.2	N.A.	71.9	132.3	N.A.	N.A.	132.8	63.6
Williamsburg	176.1	181.1	184.4	163.1	N.A.	16.9	N.A.	138.8	174.9	199.9
Winchester	170.4	349.4	86.0	130.8	208.9	171.6	N.A.	N.A.	N.A.	N.A.

TABLE II — September 1986

Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER LINAGE	NEW CAR REGISTRATIONS	August NON-AGRICULTURAL EMPLOYMENT†	WATER CONSUMED	RETAIL SALES ‡	August RETAIL SALES ‡
The State		27.0	-7.9	+6.6	2.6	19.5	3.2	0.0	3.3	5.1
Alexandria	5.2	12.2	8.9	-4.1	N.A.	19.6	+.7	+.6	- 2.7	20.0
Bristol	4.5	N.A.	-66.1	-7.1	-11.9	11.1	1.8	2.9	-1.6	+3.0
Cape Charles - Exmore	1.1	N.A.	-65.1	+6.8	N.A.	26.1	N.A.	19.8	+6.9	-5.6
Charlottesville	2.8	16.9	-65.6	-8.8	N.A.	35.7	+.1	0.0	+4.3	1.8
Danville	6.1	N.A.	-66.6	-1.4	22.8	38.3	-0.2	+0.8	N.A.	+3.0
Franklin	13.8	N.A.	66.0	+0.5	5.0	14.1	N.A.	+4.0	+7.8	-20.0
Fredericksburg	16.7	17.8	+81.2	N.A.	7.7	57.1	N.A.	9.2	13.8	26.3
Harrisonburg	10.6	16.1	98.3	N.A.	+.2	7.6	N.A.	1.8	14.1	+4.4
Lynchburg	7.6	+15.0	90.8	1.8	N.A.	17.9	3.0	+4.0	+0.9	-2.8
Newport News - Hampton	2.9	N.A.	8.8	+4.3	-7.1	19.1	-.]	1.8	3.6	+4.9
Norfolk - Va. Beach - Portsmouth	2.4	21.1	+19.0	+14.5	8.9	14.8		+1.1	0.8	+1.1
Petersburg	+1.0	151.9	813.4	N.A.	-11.2	10.1		-13.8	2.8	3.1
Richmond	4.2	11.3	-20.4	-9.4	+4.3	9.0	-.]	1.0	8.4	-1.8
Roanoke	9.2	10.8	85.3	+4.0	8.0	+.0	.2	-2.4	0.0	+11.4
Staunton	-2.1	21.6	99.0	N.A.	-1.2	5.4	N.A.	N.A.	+3.2	-4.5
Williamsburg	11.0	12.7	131.1	-10.8	N.A.	18.0	N.A.	6.8	....	16.9
Winchester	10.6	+41.1	+4.7	3.0	12.7	19.3	N.A.	N.A.	N.A.	10.4

TABLE III — Percentage Change January - September from same period last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER LINAGE	NEW CAR REGISTRATIONS	Jan.-Aug. NON-AGRICULTURAL EMPLOYMENT†#	WATER CONSUMED	RETAIL SALES ‡	Jan.-Aug. RETAIL SALES ‡
The State		22.9	21.8	8.4	+.1	14.0	+.1	5.2	1.6	9.3
Alexandria	6.4	27.8	-51.8	12.5	N.A.	16.0	7.5	-9.4	2.1	13.0
Bristol	3.0	N.A.	-47.2	8.1	1.4	18.1	5.3	9.2	+8.6	11.3
Cape Charles - Exmore	7.7	N.A.	66.2	9.1	N.A.	25.6	N.A.	27.7	+9.3	7.7
Charlottesville	7.0	80.2	-18.5	6.9	N.A.	6.7	3.4	10.2	+5.2	13.2
Danville	3.9	N.A.	19.2	5.0	0.6	10.4	0.4	0.9	N.A.	6.4
Franklin	10.2	N.A.	-11.4	7.8	3.7	+4.8	N.A.	+.3	-1.7	+4.6
Fredericksburg	12.0	2.6	-12.0	N.A.	6.2	17.8	N.A.	9.6	14.3	12.7
Harrisonburg	8.0	N.A.	5.3	N.A.	0.5	15.0	N.A.	+.0	6.8	16.3
Lynchburg	6.9	7.0	-3.7	6.8	N.A.	2.4	3.2	+.9	9.1	10.1
Newport News - Hampton	6.6	N.A.	68.9	8.1	+.1	10.6	+.]	2.4	6.8	9.0
Norfolk - Va. Beach - Portsmouth	6.3	22.6	11.5	7.0	+.8	15.9		12.1	8.5	9.1
Petersburg	+.1	52.2	161.4	N.A.	N.A.	13.9		5.4	0.9	5.5
Richmond	+.1	29.2	N.A.	3.6	-1.3	14.7	2.2]	2.2	3.4	5.2
Roanoke	5.1	-5.2	5.2	6.6	8.9	13.5	2.9	8.6	-1.2	13.0
Staunton	+.1	12.2	-11.3	N.A.	8.2	16.1	N.A.	N.A.	-3.8	12.2
Williamsburg	9.9	-15.4	71.6	5.8	N.A.	12.1	N.A.	3.1	5.4	-5.9
Winchester	14.8	-1.9	-22.3	7.5	11.0	22.3	N.A.	N.A.	N.A.	18.1

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
...Only total MSA data are available for these areas

N.A. — Not Available
O.O. — No Change

growth in retail sales, and declining building activity, all four of these series also can be expected to grow more slowly in the coming months.

Recent data show Virginia's growth definitely is slowing down. The deceleration is gentle, not hard braking, and no recession is in sight for the state. On the other hand, the current trends and forces at work indicate the deceleration will continue in the fourth quarter and in 1987. What are the likely growth rates for 1987? We currently are working on our forecasts, which will be in the November issue. RLP

BUSINESS GROWTH IN VIRGINIA

Herrington J. Bryce
Visiting Commonwealth Professor
School of Business Administration
College of William and Mary

Recently released data by the U.S. Bureau of the Census show that the growth in the number of business establishments in the State of Virginia has been faster than in the nation as a whole.

The data reveal that between 1983 and 1984 (latest period reported) the growth in the number of establishments in the nation as a whole was 4.0 percent, but in the State of Virginia it was 5.9 percent. The State outperformed the nation especially in the rate at which the number of very small business establishments grew. Some 3,000 new units employing one to four persons each were formed in the State in the one-year period, representing a growth rate of 4.2 percent compared to only 2.4 percent in the nation.

While the growth in these small establishments was especially impressive, the State outperformed the nation among establishments of each and every size — except in the 100-249 employee size, as shown in Table V. During the year eight new establishments employing 1,000 or more persons were located in the State, reflecting a growth rate that was three times as fast as the national one in this size category.

The growth was not geographically concentrated. Many counties across the State outperformed the nation. These include Fairfax, Chesterfield, Hanover, Loudoun and Prince William. On the other hand, Arlington County with an overall growth rate of 2.1 percent and cities such as Norfolk, Portsmouth and Petersburg significantly underperformed the State and other local jurisdictions. The growth in Norfolk City was less than 1 percent compared to over 8 percent in cities such as Chesapeake, Danville, Fredericksburg and Virginia Beach.

The growth in the number of establishments was 10 percent in Prince William County — the fastest among large state jurisdictions, those with more than 1,000 establishments in 1983. But the largest number of new establishments, 1,092, was in Fairfax County, creating a growth rate of 8.7 percent in one year. These new units were not concentrated in Fairfax City. The City showed a net gain of only 61 out of the 1,092 new establishments. Like the State, the largest number of new establishments in Fairfax County was in the category of units with less than 5 employees. These small units account for 546 of the County's 1,092 new establishments, exactly one-half of the total. However the county also boasts a healthy growth rate in each of the other size classes including the 1,000 or more employee class, where the county acquired three of the eight new firms in the State.

Virginia's high growth in the number of establishments translates into high growth in job opportunities and payroll. The number of employees in business establishments in the State rose by 8.4 percent compared to 6.9 percent in the country as a whole during this one-year period. Annual payroll dollars flowing from all business establishments rose by 13.1 percent in thee State, but only 10.9 percent in the nation.

One may sensibly wonder if the rapid rise in small units in the State portends a drastic change in the structure of the economy of the State. In 1983 as in 1984, about 55 percent of all establishments in the State employed less than 5 persons. Less than one percent of all establishments employed 500 or more persons. In both years, approximately 95 percent of all business units in the State employed less than 50 persons each. As far as the size of establishments is concerned, the Virginia economy is the direct mirror-image of that of the nation. The great preponderance of establishments are small.

But the very small units do not provide the bulk of payroll or employment. Small units merely ournumber large ones and grow in numbers at a faster rate. Thus, 56 percent of the jobs in private business establishments in Virginia are in units with 50 or more employees. Yet, these firms comprise less than 5 percent of all establishments in the State. The 100 largest establishments in the State employ over 200,000 persons, nearly 12 percent of all persons employed in the State's private sector. Yet, these units account for only one-tenth of one percent of all private establishments in the State.

Similarly, those small business establishments employing less than 50 persons provide about 38 percent of the payroll dollars generated by the private sector in the State, even though they account for 95 percent of the State's businesses and 44 percent of the employees. But those 5 percent of the establishments providing employment for 50 or more persons account for 62 percent of the payroll. The 100 largest employers in the State directly generate nearly 17 percent of the private sector's payroll, although they account for only 0.1 percent of all establishments in the State.

In short, the rapid rise of small establishments in the State of Virginia does not portend a shift to an economy where mini firms dominate in employment and payroll. These small units add dynamic vibrancy to the economy, and many of them will become Virginia's large firms in the future. However large firms still are the foundation of the economy, and their dominance in jobs and payroll will continue for many years to come.

The growth in the total number of establishments which the State has experienced is the result of a delicate balancing of several countervailing factors. On the positive side is population growth which is farily evenly distributed throughout the State's urban areas so as to encourage branching out by existing firms, the creation of new firms, the growth in the size of existing establishments, and the attraction of firms from other jurisdictions. Also on the positive side is the creation and nurturing of a favorable business environment by State and local governments.

On the negative side is the outmigration of firms to other jurisdictions whether in whole or in part, the demise of existing firms which for one reason or the other cannot make it, the consolidation of branches of existing firms mostly because the economic situations in branch locations are not profitable enough, and the shrinkage in the size of existing establishments.

The healthy economic boom experienced in Virginia has created an environment where the positive forces definitely outweigh the negative ones. In Virginia, the positive forces prevailed, for small businesses as well as large ones HJB

Table IV

Virginia Business Establishments
Calendar Year 1985

Employment Size Class	Number of Establishments	Percent of Total	Number of Employees	Percent of Total	Annual Payroll ($1,000)	Percent of Total
1-4	49,540	34.62	111,581	6.42	$ 1,791,414	3.37
5-9	24,738	17.3	162,921	9.4	2,213,078	4
10-19	34,930	24.4	469,588	27.1	5,784,696	10
20-49	19,420	13.6	581,673	33.6	14,087,429	26.4
50-99	5,052	3.5	337,807	19.4	9,633,919	18.1
100-249	3,743	2.6	560,937	32.3	12,306,140	23.1
250-499	526	0.4	178,146	10.2	3,950,179	7.4
500-999	194	0.1	129,298	7.4	2,330,493	4.4
1,000 or more	98	0.1	196,026	11.3	4,845,249	9.1
All Sizes	120,260	100.05	1,741,161	100.05	$53,150,843	100.05

Table V

Percent Changes, 1981-1985
Virginia and United States

Employment Size Class	In Number of Establishments		In Number of Employees		In Annual Payroll	
	Virginia	United States	Virginia	United States	Virginia	United States
1-4	4.45	2.65	5.25	3.45	9.05	8.25
5-9	3.7	3.2	3.8	3.3	9.9	8.8
10-19	8.4	6.2	8.2	5.6	10.7	10.2
20-49	7.8	6.4	7.4	5.5	10.9	11.1
50-99	10.8	9.0	10.4	9.0	10.5	11.4
100-249	9.3	9.8	8.9	9.4	10.1	14.3
250-499	13.1	8.8	11.2	8.4	10.1	10.9
500-999	12.0	7.8	9.9	8.1	10.0	10.8
1,000 or more	8.9	3.2	7.3	3.8	14.4	9.1
All Sizes	5.47	4.05	6.67	4.97	10.17	10.47

Source: County Business Patterns, U.S. Bureau of the Census; Economic Survey Division, Virginia (CBP-85-48 and CBP-84-48) U.S.A. (CBP-85-1 and CBP-84-1)

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Roy L. Pearson Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 316 November, 1986

Business in Virginia October, 1986 Data

Bank debits, electricity consumed, and water consumed all showed high growth rates in October compared to October 1985. All three of these series also grew at a higher rate than their cumulative percentage changes for the year to date. That implies to us that general business activity rose strongly in October.

All of the other October indicators also recorded good year-over-year growth, although not necessarily at an accelerating rate. The sales per store by our sample of retail businesses rose by 5.5 percent, a rate which did exceed both the August and cumulative year-to-date growth rates. New car registrations showed a good gain, 9.7 percent, in October. That gain, though, was a pullback from the 19.5 percent surge in September and falls short of the 13.5 percent cumulative advance.

Building permits advanced statewide by 14.7 percent in October after declines in August and September. However the October growth rate was below the cumulative 1986 increase, still providing evidence that planned new construction is slowing down following the hectic pace in the middle of the year.

For September the nonagricultural employment growth of 3.4 percent reveals a continuing deceleration in the growth of net new payroll jobs, pulling the cumulative increase through September down to 4.0 percent. The yearly gain will slip further in the fourth quarter, most likely yielding an annual increase for 1986 of 3.7 percent. Taxable retail sales did rebound to an even 10 percent gain in September. However we expect statewide taxable sales gains in the fourth quarter to be closer to eight percent, pulling the overall 1986 increase down to 8.6 percent, as shown in Table V. The Christmas season will be bright, but with slower growth in jobs and trade expected it is not likely to be considered outstanding by most of Virginia's businesses.

RLP

The National Economic Outlook for 1987

November marks the fourth anniversary of the current expansion, making it the second longest peacetime expansion since World War II. A fifth anniversary now seems almost certain, setting a new postwar record for longevity during peacetime, surpassing the 58-month expansion in the second half of the seventies.

The nation's real output of goods and services grew by 2.7 percent in 1985. Real growth in 1986 is expected to be 2.6 percent, almost identical to the 1985 pace. Our forecast for 1987 is another year of moderate growth, with real Gross National Product (GNP) again rising by 2.6 percent.

Our 1987 forecast matches the consensus forecast of 51 economists reported in the November issue of Blue Chip Economic Indicators. Their predictions for real GNP growth in 1987 average to 2.6 percent. Not everyone, of course, is predicting a 2.6 percent rate. However, nearly all economists agree that the two sources of strength in the economy will be continued growth in consumer demand and an improvement in our international trade. Differences in the forecasted 1987 growth rates mainly stem from disagreement about the amount of strength provided by these two sources.

The Bureau's estimates of 1986 demand and output and our forecasts for 1987 are given in Table IV. All amounts are stated in 1982 dollars, thus eliminating the effects of inflation. All of the growth rates therefore are real rates of change, showing the predicted percentage changes in the physical volume of goods and services.

As shown, the nation's domestic final demand consists of consumer demand; private fixed investment which is demand for business structures, equipment, and residential housing; and government purchases of goods and services.

Chart I

Nine Selected Business & Economic Indicators Percentage Change

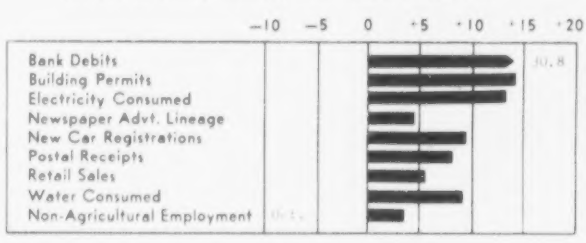
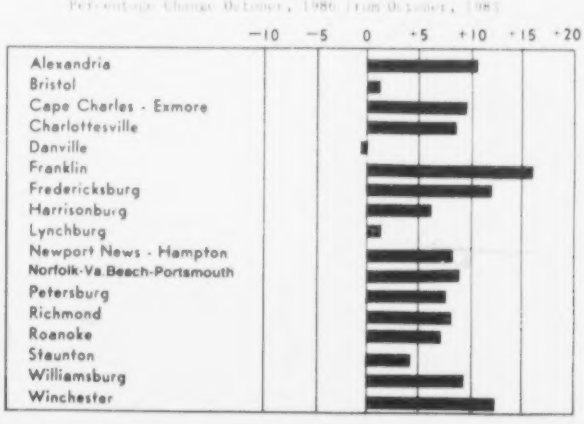


Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I October 1986

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977). Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	September NON-AGRICULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		249.9	261.8	112.9	116.1	167.5	134.3	99.9	176.2	151.2
Alexandria	160.0	24.3	138.9	141.1	N.A.	144.8	127.9	110.4	181.3	N.A.
Bristol	145.8	N.A.	55.0	76.1	82.2	97.4	109.9	114.3	149.9	182.7
Cape Charles - Exmore	123.1	N.A.	126.3	119.7	N.A.	104.9	N.A.	N.A.	106.1	140.1
Charlottesville	196.0	N.A.	154.5	128.5	N.A.	141.1	108.0	137.8	241.3	324.8
Danville	126.3	N.A.	92.8	121.3	139.5	85.9	97.8	90.1	N.A.	204.0
Franklin	159.4	N.A.	47.5	113.8	129.4	182.0	N.A.	102.3	110.4	136.2
Fredericksburg	119.7	175.6	485.7	N.A.	175.7	176.9	N.A.	78.6	95.6	N.A.
Harrisonburg	172.2	381.6	931.1	N.A.	141.7	96.2	N.A.	140.8	177.5	289.4
Lynchburg	223.4	341.6	317.9	113.4	N.A.	85.6	100.1	124.3	176.9	841.1
Newport News - Hampton	141.4	N.A.	218.1	119.0	103.4	101.3	134.9]	138.0	178.3	N.A.
Norfolk - Va. Beach - Portsmouth	184.6	464.7	161.3	143.6	100.4	121.2		89.7	269.0	N.A.
Petersburg	138.7	281.5	202.6	N.A.	35.4	7.2	122.6]	96.0	178.0	244.0
Richmond	162.5	293.7	216.2	147.8	121.6	124.		116.3	156.4	320.5
Roanoke	151.3	381.0	41.1	101.6	183.3	99.0	117.2	102.8	136.1	349.9
Staunton	92.5	100.8	137.0	N.A.	90.8	86.2	N.A.	N.A.	110.5	267.4
Williamsburg	173.7	N.A.	47.5	161.4	N.A.	139.0	N.A.	130.9	125.0	409.5
Winchester	172.3	410.4	270.1	134.8	237.2	145.0	N.A.	N.A.	N.A.	N.A.

TABLE II October 1986

Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	September NON-AGRICULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	September RETAIL SALES ‡
The State		30.8	14.7	13.6	4.6	9.7	3.4	9.1	5.5	10.0
Alexandria	10.2	5.9	-28.4	21.3	N.A.	8.0	5.3	14.9	9.1	4.9
Bristol	1.5	N.A.	-63.5	-9.8	9.7	18.7	2.7	4.9	-1.8	-7.2
Cape Charles - Exmore	9.2	N.A.	-71.7	19.0	N.A.	21.7	N.A.	25.3	-4.1	10.7
Charlottesville	8.5	N.A.	-18.7	16.5	N.A.	43.0	5.0	6.2	-1.5	1.6
Danville	-0.2	N.A.	3.8	9.5	5.9	-15.3	0.3	-4.6	N.A.	2.8
Franklin	15.7	N.A.	-48.3	14.8	4.6	141.3	N.A.	6.8	-4.2	-29.2
Fredericksburg	12.3	9.8	-45.6	N.A.	7.2	33.3	N.A.	22.7	15.5	7.5
Harrisonburg	6.1	27.8	370.5	N.A.	5.8	14.0	N.A.	1.0	0.3	20.7
Lynchburg	1.2	7.3	-16.3	3.0	N.A.	8.0	4.0	-9.8	0.2	3.5
Newport News - Hampton	8.0	N.A.	-35.8	13.6	3.9	-2.1	2.1]	20.5	4.5	20.9
Norfolk - Va. Beach - Portsmouth	8.5	93.8	-49.1	12.2	5.0	0.5		7.9	9.2	20.8
Petersburg	7.5	48.8	43.5	N.A.	-17.6	16.1	1.3]	-3.8	19.4	5.4
Richmond	8.1	22.6	31.7	12.3	-3.4	13.3		11.6	7.6	14.6
Roanoke	7.0	-7.5	-37.8	6.9	5.8	37.5	1.4	8.1	0.9	0.8
Staunton	4.0	8.1	250.0	N.A.	10.5	6.7	N.A.	N.A.	3.1	-2.8
Williamsburg	9.3	N.A.	-91.5	10.9	N.A.	-9.9	N.A.	22.6	13.6	0.4
Winchester	12.4	7.5	81.4	13.0	21.3	8.9	N.A.	N.A.	N.A.	6.5

TABLE III

Percentage Change January - October from same period last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	Jan.-Sept. NON-AGRICULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	Jan.-Sept. RETAIL SALES ‡
The State		23.2	19.3	8.8	4.4	13.5	4.0	5.6	3.8	9.4
Alexandria	6.6	27.6	-50.8	13.2	N.A.	15.2	7.3	-2.6	2.6	12.1
Bristol	2.9	N.A.	-48.9	6.6	2.2	18.1	5.1	8.6	-7.9	8.9
Cape Charles - Exmore	7.6	N.A.	47.0	9.9	N.A.	25.2	N.A.	25.9	-5.2	8.0
Charlottesville	7.0	N.A.	-18.5	7.7	N.A.	9.4	3.5	9.7	4.6	11.8
Danville	3.4	N.A.	18.2	5.4	1.2	7.6	0.2	-0.1	N.A.	6.0
Franklin	10.4	N.A.	-12.6	8.2	3.8	79.6	N.A.	4.6	-1.6	-7.9
Fredericksburg	12.4	3.7	-19.0	N.A.	6.3	19.1	N.A.	11.0	12.8	12.1
Harrisonburg	7.8	N.A.	21.1	N.A.	1.0	14.9	N.A.	3.6	6.1	16.8
Lynchburg	6.0	7.0	-6.2	6.4	N.A.	2.8	2.2	2.4	8.2	9.3
Newport News - Hampton	6.8	N.A.	56.0	8.7	4.1	9.4	4.0]	4.8	6.6	10.2
Norfolk - Va. Beach - Portsmouth	8.3	29.8	20.9	7.5	4.7	10.7		11.7	8.5	10.4
Petersburg	4.6	51.8	149.6	N.A.	N.A.	14.1	2.1]	3.6	2.2	5.5
Richmond	4.7	28.7	-0.1	6.2	-1.7	14.6	2.7	3.1	3.8	6.2
Roanoke	5.7	-5.4	1.4	6.6	9.4	15.6	N.A.	8.5	-1.0	11.6
Staunton	4.2	11.9	13.1	N.A.	8.4	15.8	N.A.	N.A.	-3.2	10.5
Williamsburg	6.2	N.A.	32.8	6.3	N.A.	18.4	N.A.	5.1	6.3	-5.2
Winchester	14.5	-0.7	-14.4	8.0	12.1	20.9	N.A.	N.A.	N.A.	17.9

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
⊃Only total MSA data are available for these areas.

N.A. — Not Available
O.O. — No Change

We predict that all three components of domestic final demand will grow less in 1987 than in 1986. Government purchases in real terms will only grow about 1.5 percent, less than one-half of the 1986 growth rate. Fixed investment most likely will decline slightly as the continuing slowdown in construction is reinforced by the adverse effects of tax reform. Our forecast is a one percent drop in fixed investment.

However, the major source of slower domestic demand growth will be slower real growth in consumption in 1987. Consumers provided the only real strength in 1986, increasing their real outlays by 3.9 percent. Falling interest rates, gasoline prices, and inflation in general spurred consumer purchases in 1986. Real disposable income also grew more rapidly in 1986 than in 1985. In 1987, consumers will not have as much incentive or ability to increase their demand for goods and services. Interest rates are likely to remain close to current levels for most of the year. Our forecast for the Consumer Price Index is a 3.2 percent rise in 1987, compared to only 1.9 percent in 1986. Furthermore, the real value of disposable personal income will grow at a slower 2.3 percent rate in 1987, down almost a point from the 3.2 percent expected for 1986. In that environment, we predict real consumer demand will rise by only 2.7 percent in 1987. That makes consumption growth again the major source of strength in domestic demand for goods and services. But, clearly not as strong a force as in 1986.

Therefore our assessment of the nation's domestic sources of demand yields a forecast of only a 1.8 percent real gain in domestic final demand. We agree with the majority of forecasters that output growth higher than that must, and will, come from a reversal (finally!) in the pattern of growth in the nation's exports and imports. The real value of our exports is beginning to rise, and the rising prices of imports are expected to slow the growth in the volume of imports. Our projection is the net export deficit (exports minus imports) will narrow, from an estimated $144 billion (1982$) in 1986 to $122 billion (1982$) in 1987. That improvement of $22 billion will be a fifteen percent swing in our favor for the trade balance. The addition to the real GNP growth rate will be 0.7 percent, a small but welcome boost to the nation's real output.

Adding in allowance for some additions to business inventories, the bottom line is a forecasted real GNP in 1987 of $3,775 billion (1982$), yielding a real growth rate of 2.6 percent. That will be lower than we would like to see, but at least it will be another twelve months of real expansion in the nation's output. The inflation rate will increase, but still be in a reasonable range. Out forecast is an inflation rate of 3.2 percent, for both the Consumer Price Index and the GNP Implicit Price Deflator. RLP

The Virginia Economic Outlook for 1987

Our 1987 forecast for the Commonwealth is slower growth than in 1986, in both nominal (current dollar) and real terms. That runs counter to the national forecasts, where we expect the real growth rate to be unchanged. Why this divergence between the state and nation's growth paths?

In several issues this year (May, June, July, September, and October) we have documented Virginia's outstanding growth in recent years, growth far exceeding the nation's performance. As reported in September, Virginia's total personal income grew by 29.7 percent from 1982 through 1985, the seventh highest growth among the fifty states. However, Virginia's exceptional boom has not consisted solely of superior long-run trend relationships, sustainable for years to come. In part the state's booming growth has been built on our own favorable cyclical forces, such as the extraordinary surge in construction since 1982. We already have begun to see signs of decelerating growth as those cyclical influences wind down, and there will be more widespread deceleration in 1987. Even with slower growth Virginia still will outpace the nation in 1987. However the state's margin of superiority will narrow in the coming year.

The Commonwealth's 1985 values, estimates for 1986, and forecasts for 1987 for key variables such as personal income, retail sales, and nonagricultural employment (place of work) are given in Table V. Both resident personal income and retail sales are shown only in current dollar amounts since we do not have appropriate price indexes with which to deflate the state figures. However, inflation as measured by the national Consumer Price Index (3.5 percent in 1985, an estimated 1.9 percent in 1986, and a predicted 3.2 percent in 1987) can be used to derive the approximate real income growth in Virginia.

By U.S. Department of Commerce estimates, Virginia achieved an 8.4 percent increase in resident personal income in 1985. We predict the 1986 growth rate will be 7.0 percent, a drop of 1.4 percentage points. Adjusting for inflation gives a different perspective. Virginia's real income rose by almost five percent in 1985. With the low national inflation rate of 1.9 percent this year, the state's real income growth will remain about 5 percent in 1986. However the 1987 outlook is for a decline in the state's income growth in both current dollar and real terms. We predict the total personal income of Virginians will rise by 6.1 percent in 1987. Adjusting for a national inflation rate of 3.2 percent, the real income increase is projected to fall to 2.8 percent.

Similar relationships are forecasted for retail sales. In current dollar amounts we expect retail sales growth to drop from the 9.6 percent realized in 1985 to 8.6 percent in 1986 and then 7.4 percent in 1987. Due to the higher inflation rate forecast for 1987, that translates into an even larger slowdown in real growth for retail trade next year.

Nonagricultural employment growth already has been decelerating for two years. These payroll jobs rose by 5.7 percent in 1984, followed by a 4.9 percent increase in 1985. Based on 1986 statistics through September we estimate the year-over-year gain for 1986 will be 3.7 percent. By industry sector, we expect construction, private (wholesale and retail) trade and services, and government employment will rise by smaller percentages in 1986 than 1985.

For 1987, our forecast is nonagricultural employment growth will slow even further, to a 2.3 percent annual increase. The major reason for the slower growth will be another decline in the growth rate for private trade and service jobs, accompanying the generally lower growth in real income and retail trade. Another contributing factor will be a modest decline in building activity. Construction will be at a high level, and the projected 1987 construction employment of 158,000 persons will be the second highest level of employment in that industry in Virginia's history, second only to 1986. However, our evidence suggests Virginia's building boom has passed its peak and a moderate decline can be expected next year. With a decline in construction employment and slower growth in trade and service jobs, the modest gains in manufacturing and government jobs will not be sufficient to hold total employment growth to the 1986 pace.

Our view is most segments of the Virginia economy will experience slower growth in 1987 — still above the national average but by a slimmer margin. RLP

TABLE IV

THE U.S. ECONOMY
FORECASTS FOR 1986 AND 1987 CALENDAR YEARS
IN 1982 DOLLARS

	1986 ($Bill.1982$)	% Change 1985-1986	1987 ($Bill.1982$)	% Change 1986-1987
Domestic Final Demand				
Personal Consumption	$2,415	3.9%	$2,480	2.7%
Private Fixed Investment	650	1.9	644	-1.0
Government Purchases	744	3.2	755	1.5
Total Domestic Final Demand	$3,809	3.4%	$3,879	1.8%
Plus: Net Exports	-144	+33.1	-122	-15.3
Equals: Final Sales	$3,665	2.5%	$3,757	2.5%
Plus: Change in Inventories	15	N.A.	18	N.A.
Equals: Gross National Product	$3,680	2.6%	$3,775	2.6%
Disposable Personal Income	$2,610	3.2%	$2,670	2.3%
Saving Rate	4.3%	N.A.	3.9%	N.A.

N.A.: Not Applicable

Source: Bureau of Business Research, College of William and Mary, November 18, 1986

TABLE V

THE VIRGINIA ECONOMY
ACTUAL VALUES FOR 1985 AND FORECASTED VALUES
FOR 1986 AND 1987

	1985		1986		1987	
	Level	Percent Change	Level	Percent Change	Level	Percent Change
Resident Personal Income ($mills.)	$82,980	8.6%	$88,790	7.0%	$94,210	6.1%
Taxable Retail Sales ($mills.)[a]	$31,214	9.6%	$33,900	8.6%	$36,410	7.4%
Nonagricultural Employment (thous.)	2,447.1	4.9%	2,538	3.7%	2,597	2.3%
Manufacturing	423.3	0.5%	428	1.1%	432	0.9%
Mining	17.3	-5.5%	17	-1.7%	17	0.0%
Construction	151.3	13.9%	165	9.1%	158	-4.2%
Private Trade and Services	1,337.6	6.5%	1,402	4.8%	1,455	3.8%
Government	517.6	2.5%	526	1.6%	535	1.7%

[a]Retail sales subject to the Virginia Retail Sales and Use Tax.

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Roy L. Pearson, Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

COLLEGE OF WILLIAM AND MARY
BUREAU OF BUSINESS RESEARCH
SCHOOL OF BUSINESS ADMINISTRATION
WILLIAMSBURG, VIRGINIA 23185

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BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 317 January, 1987

Business in Virginia
November and December, 1986 Data

In November, bank debits, building permits, electricity consumed, and newspaper advertising lineage were the high-growth indicators. The first three of these are evidence of continued strong growth of goods production in Virginia. Nonagricultural employment rose by 3.4 percent in November compared to November 1985, slightly above October's 3.3 percent gain. Thus payroll job growth, while below the 4.2 percent rate of November 1985, was steady as we approached the year's end.

New car registrations increased by 4.6 percent in November compared to the same month last year, somewhat of a surprise after the large gains earlier in the fall. Our sample of retail stores, however, reported a very modest increase of 3.4 percent in sales per store. The taxable retail sales data for October revealed an 8.0 percent decline statewide, with decreases in most of the urban areas we track. Therefore both of our retail sales measures showed a slow start in fourth quarter consumer spending in Virginia.

In December, bank debits continued to grow strongly, up by 20.0 percent. Building permit growth also remained strong with a 15.5 percent rise. The most remarkable report was new car registration, soaring by 35.2 percent compared to December of 1985. Many Virginians evidently did decide to beat the January 1 tax changes. For retailers in our sample, the December sales growth per store was a more moderate 5.6 percent. An acceleration from November's growth rate but not evidence of booming Christmas sales.

The preliminary data now available to us indicate that December was a month of relatively steady, moderate growth with the notable exception of the new car sales. That performance means that we are entering 1987 with less momentum than existed at the beginning of 1986. RLP

The Virginia Economy in 1986

The Virginia economy grew more slowly in 1986 than in 1985, as expected. As we move into 1987, a review of the path followed in 1986 provides a healthy perspective . The closing months of 1985 produced accelerating growth in income and payroll jobs, giving us good momentum as 1986 began. The first quarter of 1986 offered little evidence of decelerating growth. Early federal reports showed Virginia's personal income grew at a 10.1 percent annual rate between the fourth quarter and first quarter, the second highest rate among the fifty states. That later was revised upwards to an 11.4 percent rate. On a first quarter to first quarter basis, the income gain was a more modest but still outstanding 7.7 percent. Payroll job growth remained very strong in the first quarter, up 4.8 percent compared to the first quarter of 1985. New car sales continued to boom, up 15.4 percent over the same period in 1985. First quarter growth rates for general retail sales and for building permits were lower than in 1985, but the high income growth and declining interest rates pointed towards accelerating growth for these sectors in the second quarter.

Chart I

Nine Selected Business & Economic Indicators Percentage Change

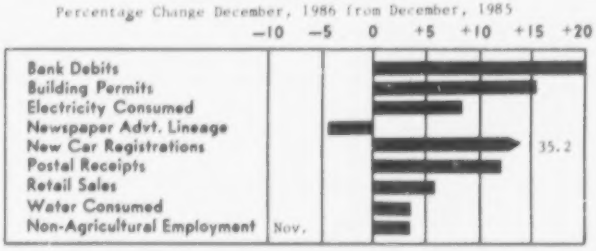

Chart II

City Indices

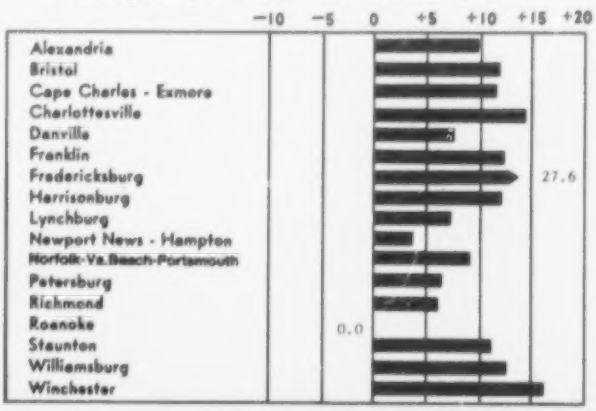

TABLE II November 1986 Percentage Change from same month last year.

CITY	CITY INDEX *	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	October NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	October RETAIL SALES ‡
The State		18.9	16.7	15.5	14.5	4.6	3.3	5.5	3.4	-8.0
Alexandria	4.9	11.9	-71.8	25.4	N.A.	6.2	4.8	5.6	4.4	-16.1
Bristol	-1.2	N.A.	278.3	9.6	0.8	2.0	3.1	10.7	-10.7	-4.5
Cape Charles - Exmore	4.6	N.A.	262.5	9.4	N.A.	17.9	N.A.	30.8	-6.7	-5.9
Charlottesville	2.9	42.8	-48.3	13.9	N.A.	-7.6	6.0	6.6	2.0	-2.6
Danville	-3.5	N.A.	-22.8	7.3	10.4	-26.0	0.0	-4.2	N.A.	-8.6
Franklin	6.0	N.A.	150.5	18.4	4.2	N.A.	8.7	-4.1	-12.6	
Fredericksburg	4.5	0.2	-44.1	N.A.	4.1	-11.0	N.A.	39.2	-1.1	2.7
Harrisonburg	2.5	N.A.	7.1	N.A.	2.9	-2.8	N.A.	-5.8	5.9	5.2
Lynchburg	4.8	-8.9	73.2	17.4	N.A.	-3.8	1.4	-13.0	11.4	3.8
Newport News - Hampton	4.7	N.A.	150.4	6.0	11.7	11.8	2.5]	14.0	3.2	-13.8
Norfolk - Va. Beach - Portsmouth	4.8	78.9	19.8	14.5	7.9	14.7		10.4	1.0	-10.0
Petersburg	-1.6	-11.7	-66.7	N.A.	-35.2	26.5	1.2]	7.6	-1.6	-7.7
Richmond	3.0	8.9	97.1	10.2	5.0	12.7		1.9	3.6	-14.9
Roanoke	3.0	-12.1	43.2	12.5	15.3	-9.6	1.1	-4.2	4.7	-2.3
Staunton	2.1	3.8	-71.9	N.A.	13.0	-0.6	N.A.	N.A.	-8.4	0.3
Williamsburg	7.3	15.8	182.9	9.3	N.A.	2.3	N.A.	19.5	12.5	-17.5
Winchester	9.1	17.7	-60.0	11.2	13.8	2.6	N.A.	N.A.	N.A.	8.8

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
] Only total MSA data are available for these areas

N.A. — Not Available
0.0 — No Change

Among the state's eight metropolitan areas, the first quarter leaders in nonagricultural employment growth were Northern Virginia, up 9.4 percent year over year; Bristol, up 6.8 percent; and Hampton Roads, up 5.8 percent. Our City Index offers a different measure, dominated by retail trade growth and calculated for all seventeen urban areas covered in the Report. The first quarter growth leaders based on the City Index were the Lynchburg, Fredericksburg, and Roanoke areas.

During the second quarter Virginia's personal income growth slowed by a negligible amount to 7.6 percent (year over year). Payroll employment growth experienced a much more pronounced deceleration of 1.2 percentage points to a 3.6 percent rate. However, retail sales took off in May and June, with gains of 20.4 percent and 15.4 percent respectively. Building permits skyrocketed, with a May advance of 38.4 percent and a June rise of 142.1 percent. New car sales meanwhile became erratic month to month and grew at a slower pace for the quarter.

The same three metropolitan areas remained the leaders in payroll job growth, but all three experienced significantly slower growth. For Northern Virginia the second quarter rate was 7.2 percent; in Bristol, 4.3 percent; and for Hampton Roads, 3.7 percent. For the first half of 1986 compared to the same period in 1985, the state's performance was outstanding. Personal income had increased 7.6 percent, taxable retail sales 10.6 percent, building permits 33.4 percent and payroll jobs 4.2 percent. By our City Index, the three first half leaders were Winchester, Fredericksburg, and the Norfolk-Virginia Beach-Portsmouth areas.

In the third quarter Virginia experienced a slowdown in personal income growth, to 7.1 percent compared to the third quarter of 1985. The slower resident income growth and low gains in tourism produced lower increases in retail sales: in July, August, and September the growth rates were below ten percent. The growth pattern in building permits also reversed course. After a 21.1 percent rise in July, building permits fell in August and September compared to 1985 levels. However, new car registrations soared in August, up 38.4 percent, followed by a 19.5 percent rise in September, thanks to the low interest rate offers.

Nonagricultural employment growth remained steady at 3.6 percent in the third quarter. Among the eight metropolitan areas, Northern Virginia still was the job growth leader with a 5.3 percent year-over-year gain. However, that rate represented another significant drop from the 7.2 percent of the second quarter and 9.4 percent in the first quarter. On the other hand, the Charlottesville area began to accelerate, moving into second place with a 4.9 percent increase in payroll jobs. Bristol was third, with a steady 4.3 percent rise.

The most revealing development in the third quarter was the accelerating growth in the nonmetropolitan areas of the state. Payroll job growth in nonmetropolitan areas was 5.3 percent in the third quarter, versus only 3.0 percent for the eight metropolitan statistical areas combined. That shifting growth pattern also was reflected in general retail sales growth, with Fredericksburg, Harrisonburg, and Winchester consistently among the monthly leaders.

Virginia ended the third quarter with cummulative year-over-year gains of 7.5 percent in personal income, 9.4 percent in general retail sales (excluding automobiles), 14.0 percent in new car registrations, 23.8 percent in new building permits, and 4.0 percent in payroll jobs. A very strong year to date performance, even though only new car registrations had recorded rising growth in the third quarter.

For nonagricultural employment, only data through November are available as we go to press. For October and November combined, Virginia's payroll employ-

SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I December 1986

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	NON AGRI-CULTURAL EMPLOYMENT	WATER CONSUMED	RETAIL SALES†	POSTAL RECEIPTS
The State		243.6	215.6	149.2	109.1	164.9	135.9	86.7	301.6	370.0
Alexandria	234.8	27.4	292.1	160.2	N.A.	160.4	179.9	91.6	350.6	N.A.
Bristol	185.9	N.A.	79.9	112.3	83.8	104.2	110.9	90.3	253.2	412.3
Cape Charles - Exmore	137.9	N.A.	296.5	134.1	N.A.	115.4	N.A.	N.A.	96.0	289.8
Charlottesville	227.3	99.4	421.9	139.5	N.A.	123.7	110.4	114.0	327.9	347.2
Danville	130.5	N.A.	101.4	117.0	137.8	82.7	99.0	83.6	N.A.	263.0
Franklin	181.6	N.A.	71.6	146.2	137.3	155.7	N.A.	96.0	192.9	338.5
Fredericksburg	317.4	222.8	227.2	N.A.	160.1	176.5	N.A.	73.3	276.5	982.4
Harrisonburg	199.0	N.A.	173.3	N.A.	145.4	100.5	N.A.	133.0	217.0	362.8
Lynchburg	218.6	349.0	168.1	137.6	N.A.	79.3	99.2	112.6	281.6	475.6
Newport News - Hampton	169.9	N.A.	311.2	120.8	100.4	92.4	136.2	110.5	266.2	N.A.
Norfolk - Portsmouth	231.5	60.4	343.7	160.7	83.3	119.3		81.8	423.5	N.A.
Petersburg	177.4	191.6	97.7	N.A.	26.1	82.8	123.7	96.4	257.7	317.2
Richmond	201.8	322.3	141.5	171.1	115.6	104.9		96.5	283.6	354.0
Roanoke	183.3	419.7	97.7	119.4	175.6	78.9	118.3	98.2	226.4	379.9
Staunton	185.2	107.6	330.2	N.A.	88.0	92.6	N.A.	N.A.	194.2	347.8
Williamsburg	213.2	N.A.	71.6	162.7	N.A.	153.4	N.A.	105.9	213.8	428.8
Winchester	162.9	492.8	N.A.	137.4	234.7	116.6	N.A.	N.A.	N.A.	N.A.

TABLE II December 1986

Percentage Change from same month last year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	November NON AGRI-CULTURAL EMPLOYMENT	WATER CONSUMED	RETAIL SALES †	November RETAIL SALES ‡
The State		20.0	15.5	8.4	-4.3	35.2	3.4	3.5	5.6	N.A.
Alexandria	9.9	33.9	137.0	11.6	N.A.	40.9	4.1	7.6	1.9	N.A.
Bristol	12.0	N.A.	-4.9	7.4	-3.7	46.0	3.4	-16.7	19.9	N.A.
Cape Charles - Exmore	11.6	N.A.	30.0	15.0	N.A.	54.3	N.A.	13.5	-4.4	N.A.
Charlottesville	14.8	28.0	60.4	3.5	N.A.	58.0	5.2	0.6	12.0	N.A.
Danville	7.5	N.A.	-11.0	11.7	-0.5	7.3	05.	8.6	N.A.	N.A.
Franklin	12.3	N.A.	10.3	1.2	-0.2	86.3	N.A.	1.8	-0.9	N.A.
Fredericksburg	27.6	42.5	215.6	N.A.	7.7	36.3	N.A.	21.4	33.3	N.A.
Harrisonburg	12.1	N.A.	-66.2	N.A.	3.2	42.7	N.A.	2.1	8.1	N.A.
Lynchburg	7.3	-12.0	332.7	11.9	N.A.	5.6	2.4	4.4	8.9	N.A.
Newport News - Hampton	3.5	N.A.	15.5	14.0	-1.2	12.1	3.2	0.7	-0.3	N.A.
Norfolk - Va. Beach - Portsmouth	9.0	9.6	19.8	12.4	-5.1	37.5		7.3	5.6	N.A.
Petersburg	6.5	-8.9	-57.9	N.A.	-37.2	48.3		1.9	10.4	N.A.
Richmond	5.9	30.5	-22.8	13.6	-12.3	28.3	1.6	-0.6	5.1	N.A.
Roanoke	0.0	-6.6	-2.3	-23.8	-6.5	4.1	1.3	-0.6	8.5	N.A.
Staunton	11.2	6.8	391.9	N.A.	-6.2	34.8	N.A.	N.A.	9.1	N.A.
Williamsburg	12.4	N.A.	-68.4	3.9	N.A.	18.3	N.A.	26.0	8.8	N.A.
Winchester	15.9	22.6	N.A.	7.5	11.4	28.8	N.A.	N.A.	N.A.	N.A.

TABLE III

Percentage Change January - December from same period last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	Jan.-Nov. NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	Jan.-Nov. RETAIL SALES ‡
The State		22.6	14.7	11.8	4.1	14.4	3.9	5.8	4.0	N.A.
Alexandria	6.3	26.0	-50.3	13.9	N.A.	16.5	6.7	-1.1	2.7	N.A.
Bristol	2.7	N.A.	-34.3	6.9	1.5	18.8	4.7	6.4	-5.5	N.A.
Cape Charles - Exmore	4.5	N.A.	57.6	10.3	N.A.	26.9	N.A.	25.2	-11.8	
Charlottesville	6.7	N.A.	-12.8	7.8	N.A.	10.9	3.9	8.7	5.1	N.A.
Danville	2.7	N.A.	13.0	6.1	1.8	5.2	0.2	0.2	N.A.	N.A.
Franklin	14.2	N.A.	-9.7	8.6	3.4	77.6	N.A.	4.6	1.7	N.A.
Fredericksburg	12.7	15.1	-17.7	N.A.	6.2	18.0	N.A.	11.5	13.5	N.A.
Harrisonburg	6.4	N.A.	11.8	N.A.	1.4	15.4	N.A.	2.6	6.1	N.A.
Lynchburg	5.6	3.9	3.0	7.6	N.A.	2.5	2.2	1.1	8.6	N.A.
Newport News - Hampton	5.8	N.A.	53.2	8.9	3.3	9.7	3.8	4.5	5.2	N.A.
Norfolk - Va. Beach - Portsmouth	7.8	34.5	20.7	8.1	4.1	12.7		11.2	7.3	N.A.
Petersburg	5.2	38.1	80.0	N.A.	N.A.	17.2		3.7	2.8	N.A.
Richmond	4.6	27.1	7.8	7.1	-2.0	13.8	2.0	2.7	4.0	N.A.
Roanoke	4.5	-6.0	2.5	3.1	8.4	11.1	2.4	0.6	0.8	N.A.
Staunton	3.2	10.9	26.6	N.A.	7.4	16.1	N.A.	N.A.	-2.5	N.A.
Williamsburg	8.8	N.A.	28.7	6.1	N.A.	17.1	N.A.	7.7	7.2	N.A.
Winchester	15.8	6.8	N.A.	8.1	12.2	20.2	N.A.	N.A.	N.A.	N.A.

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
⊐ Only total MSA data are available for these areas

N.A. — Not Available
O.O. — No Change

ment was 3.4 percent above the 1985 level, a slight slowdown from the third quarter growth of 3.6 percent. Nonmetropolitan areas were again the leaders, with a 4.6 percent gain compared to only 3.0 percent in the eight metropolitan areas combined. Among the metropolitan areas, only Charlottesville was experiencing accelerating growth, rising to a 5.6 percent rate for October and November. The cummulative January through November increase in payroll jobs in 1986 was 3.9 percent, down a percentage point from the 1985 growth rate. This deceleration in employment growth paralleled the deceleration in personal income growth, from 8.4 percent for calendar year 1985 to 7.5 percent for the first three quarters of 1986.

Our retail sales sample, predominantly general merchandise retailers, reported steady but modest growth in sales per store during the fourth quarter: the October increase was 5.5 percent; November, 3.4 percent; and December, 5.6 percent. The January-December 1986 growth rate was 4.0 percent, down 2.2 percentage points from the 1985 gain of 6.2 percent. When the full year's data for total sales subject to Virginia's four percent sales tax are available, we expect they also will show a decline in the 1986 growth rate of one to two percentage points compared to 1985. Building permits statewide grew at a steady, relatively strong pace in the fourth quarter: 14.7 percent in October, 16.7 percent in November, and 15.5 percent in December. That brought the increase for all of 1986 to 14.7 percent, well above the 1985 growth of 8.8 percent. New car registrations grew very moderately in October and November before soaring 35.2 percent in December as people rushed to beat the 1987 tax changes. The total 1986 growth in new car registrations was 14.4 percent, surpassing the 1985 gain by 11.8 percent.

For the year, Virginia experienced slower growth in personal income, retail sales, and payroll jobs. Only new car registrations and building permits recorded higher growth rates than in 1985. Our November prediction, still unchanged, is both new car registrations and building permits will decline in 1987. Therefore we continue to expect further decleration in Virginia's overall growth in 1987, as described in the November issue. RLP

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Roy L. Pearson Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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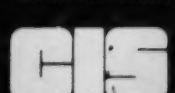

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report 318 **February 1987**

Business In Virginia January, 1987 Data

In January the Virginia economy experienced the expected slowdown in new car registrations and building permits. Recall that in December new car registrations soared by 35.2 percent compared to December 1985 as individuals rushed to beat the new state and Federal laws. Those car sales undoubtedly borrowed significantly from future demand. That is apparent in the January data which reveal a decrease of 16.8 percent in new car registrations from the January 1986 levels. The decline was widespread across Virginia, with new car sales down in all the urban areas we cover except Franklin.

Building permits showed a similar decline in January, down 33.8 percent compared to a year ago. However, this decrease was not as universal geographically. Increases were reported by six of the sixteen urban areas for which January data are available.

The January retail sales statewide by our sample of retail stores also fell, by a modest 0.9 percent, relative to January 1986. Among the fifteen areas reporting, ten experienced declines.

There was a distinct lull in most types of business activity in Virginia in January. Much of the lull was temporary, due to the snows and year-end tax maneuvering. However some of it also reflects the continuing deceleration of the Commonwealth's economic growth.

The taxable sales data for November and December now are available. The November statewide increase was 10.5 percent, and nine of our seventeen urban areas experienced gains of nine percent or more. The growth leaders in November were the Harrisonburg area, up 18.8 percent compared to November 1985; the Lynchburg metropolitan area, up 16.7 percent; Northern Virginia, up 13.5 percent; and the Fredericksburg area, up 12.9 percent.

The cumulative statewide increase for January through November was 7.8 percent, about in line with our expectations. However, the December data are both surprising and partially misleading. The reported taxable sales for December show a 17.5 percent decline compared to December 1985. The key word is reported. The January snows caused an unusually large number of businesses to be late in reporting their December sales. Therefore the December taxable sales definitely are understated. How much we will not know for some time. Adding the currently available December sales to the rest of the year yields a preliminary 1986 gain of only 5.4 percent versus 1985. Our best guess is the actual increase for the year was in the 7 - 8 percent range.

In December, payroll employment in Virginia was 3.1 percent above December 1985. That growth rate represents a continuation of the pattern of decelerating job increases. The cumulative 1986 nonagricultural employment gain was 3.8 percent, down over a point from the 1985 growth of 4.9 percent. Among Virginia's eight metropolitan statistical areas, four experienced slower job growth in 1986 than 1985: Northern Virginia, Hampton Roads, Richmond-Petersburg, and Roanoke. However the other four achieved higher employment growth. The Bristol and Charlottesville areas accelerated significantly, to 4.4 percent and 4.0 percent respectively. Lynchburg's 3.7 percent for 1986 was slightly above 1985's 3.6 percent. And the Danville area moved from a decline of 1.8 percent in 1985 to a 0.2 percent rise. Diversity and balance remain key features of the Virginia employment performance, with differing area responses to the changing national economic scene. RLP

Chart I

Nine Selected Business & Economic Indicators Percentage Change

Percentage Change January, 1987 from January, 1986

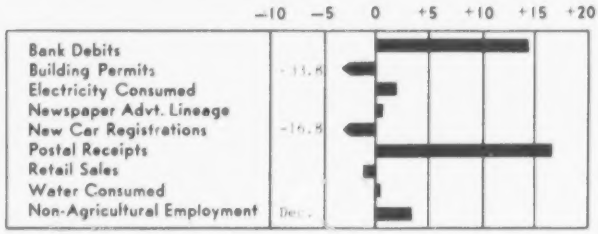
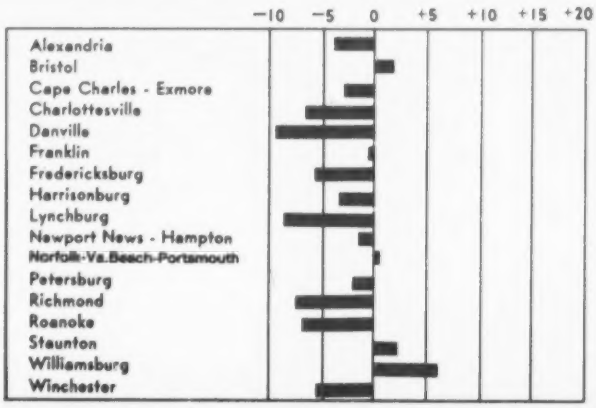


Chart II

City Indices

Percentage Change January, 1987 from January, 1986



YOUR HEALTH - A PERSONAL RIGHT OR A JOB RESPONSIBILITY?

Herrington J. Bryce
Visiting Commonwealth Professor
School of Business Administration
College of William and Mary

We can expect more and more employers to be taking drastic actions to influence the health status and lifestyles of their workers. Banning cigarette smoking and introducing drug testing are not interesting simply because they raise constitutional questions. There are important costs that bother many employers — many of whom in the last ten years or so have increasingly entered into lifestyle issues of their workers.

Until recently most employers transferred the risk associated with employee health, disability and death to insurance companies. They were willing to buy group insurance policies to cover their workers and have very little further involvement other than to transmit the employees' claims to the insurance company. Some employers even had the worker transmit the claims directly to the insurance company thus reducing the administrative load on the employer. The strategy was to shift the risk and administrative burden to an insurance company so that the employer could concentrate on making profits.

In recent years we have witnessed some major shifts in the attitude of employers toward the health of their workers. This shift has included promoting better health practices, restricting and now prohibiting smoking, and drug testing. One reason for this development is the realization by employers that insurance policies typically cover only a limited part of the losses they incur when employees become ill, disabled or die. The typical group policy bought by the employer pays the worker, the worker's doctors, hospital, undertaker and beneficiary. The employer gets nothing. Yet, a considerable part of the loss is suffered by the employer in terms of days away from the job, declining productivity, and the cost of recruiting and training replacements. Most companies protect themselves against these latter losses only as far as their top managers are concerned. Yet the loss can be considerable among rank and file workers, particularly where special skills are required.

A second reason for the shift in attitude of employers is the rising clamor by employees that the work place be healthy. Here there has been an interesting twist. Most occupational safety regulations emphasize prohibitions against the employer from making the work environment unhealthy. Now, a growing number of employees are conscious of the fact that a considerable amount of the unhealthiness in the work place may result from the behavior of their fellow employees. This has forced employers to become more involved in the health habits of their workers so as to retain them, increase their productivity, and avoid liability suits.

Prior to the revolutionary changes in workmen's compensation laws the employer's liability for a worker's injury was limited if the employer could prove that the injury resulted from contributory negligence on the part of the injured employee or a fellow worker. Today, the worker collects regardless of who is at fault. But workmen's compensation insurance, compulsory as it is, indemnifies the worker — not the employer. Hence, whether the injury is job-related and, therefore, covered by workmen's compensation or job-unrelated and, therefore, covered by the group insurance policy, the employer pays a premium for which there is no indemnification of the employer for losses resulting from the employee's inability to perform up to speed — if at all.

A third reason for the rising involvement of employers in health and lifestyle issues is that insurance costs have risen significantly in recent years. Some have argued that the very existence of group insurance policies has contributed to the rising costs of medical insurance because the doctors and hospitals can be assured of being paid by the insurance companies. Moreover, it is alleged that the workers have little to be vigilant about regarding costs because a third party pays. Whether these arguments hold sufficient water to be credible is not the point. The point is that the employer ultimately covers the costs as the insurance companies increase their premiums.

As a result of these developments, more and more employers have taken to controlling their costs by controlling their exposure to the risk that an employee will become ill or die on or off the job. We are now witnessing some extreme actions such as employers banning workers from smoking on or off the job, employers demanding that employees submit to drug tests, and employers introducing physical fitness programs and incentives. There are serious questions about the propriety of these actions ranging from their constitutionality to their effectiveness. Is an employee's off-the-job activity strictly his or her business and none of the employer's?

A quick "no" response to this question becomes easily challengeable when one considers that many off-the-job activities determine on-the-job performance and expose the employer, customers and fellow workers to serious risks. All these risks eventually express themselves either in higher costs to the employer or in declining revenues. Would you choose an airline that had a loose policy toward the health and drug use of its pilots over one that has a more restrictive policy?

Aside from the constitutional issues that are being created by the restrictive responses of employers, there are questions of effectiveness. Ever since President John F. Kennedy's fifty-mile walk and physical fitness campaign, every President has given some encouragement to being fit. Many more companies in the last decade or so have promoted physical fitness among their employees. The literature on physical fitness has expanded a hundredfold. There is no lack of information on physical fitness. Yet, a study by Carl J. Caspersen, Gregory M. Christenson and Robert A. Pollard in the 1986 November-December issue of Public Health reveals what to me are some very disappointing results. Of the 779,000 men and 192,000 women responding to a national health promotion and disease prevention questionnaire, only 8 percent of the former and 7 percent of the latter engaged in regularly active and appropriate physical activity. The results are not significantly better when breakdowns are made by age, occupation, income or race.

These results suggest that there is still a lot of work to be done to achieve widespread employee participation in health improvement activities. There is reason too for seeking the participation not just of the workers, but of their families. The typical fitness program sponsored by employers focuses on the worker. Yet, the employer's cost exposure transcends to the worker's family since dependents are often covered under the employer's program with the employer

bearing part if not all of the cost of such coverage.

A report by Thomas Kottke, Michael Rennert and others published by the Public Health Service Office of Disease Prevention and Human Promotion of the U.S. Department of Health and Human Services summarizes and draws several inferences from previous studies about identification of risk factors. While there is no evidence that they intended their study to relate to the issue we are discussing, it does. Their study found that by focusing on fewer than 10 risk factors, nearly 40 to 70 percent of the deaths, one-third of acute disability, and two-thirds of chronic disability in the United States could be avoided. The factors they cite are cigarette smoking, diets high in saturated fats, dietary deficits, worksite hazards, alcohol and drug abuse, hypertension, and air pollution.

But how should we focus on these factors? Employers, rather than have rules that govern all employees, could simply identify those who are members of the high-risk population and induce them to use preventive measures, therefore reducing the employee's risks and the employer's costs.

The inferences to be drawn from the study imply that

SELECTED BUSINESS AND ECONOMIC INDICATORS
FOR 17 CITIES

TABLE I January 1987 Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1967) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	December NON-AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		273.6	191.7	164.3	87.3	162.6	136.3	81.4	126.8	316.3
Alexandria	138.0	280.5	42.0	179.8	N.A.	129.2	180.9	88.2	129.3	N.A.
Bristol	102.5	N.A.	47.9	141.8	65.7	84.1	110.9	68.1	124.9	307.3
Cape Charles - Exmore	128.2	N.A.	397.8	137.6	N.A.	78.0	N.A.	N.A.	116.7	203.3
Charlottesville	153.5	240.6	267.7	148.4	N.A.	145.4	110.4	72.8	163.3	281.0
Danville	119.7	N.A.	120.7	111.4	93.1	89.9	98.0	95.5	N.A.	230.5
Franklin	133.7	N.A.	29.7	148.0	101.4	121.3	N.A.	92.8	115.5	258.9
Fredericksburg	242.2	143.0	140.4	N.A.	128.7	191.2	N.A.	59.4	163.1	826.9
Harrisonburg	151.4	248.0	290.6	N.A.	90.9	108.1	N.A.	120.5	143.6	309.2
Lynchburg	231.1	459.1	114.2	137.3	N.A.	110.8	99.6	125.1	166.4	876.7
Newport News - Hampton	135.3	N.A.	272.1	135.0	87.7	104.2	135.9]	111.5	169.3	N.A.
Norfolk - Va. Beach - Portsmouth	156.2	104.2	331.8	186.0	80.4	121.6		78.6	215.5	N.A.
Petersburg	134.3	224.3	434.5	N.A.	N.A.	85.1	124.8]	91.7	136.4	229.3
Richmond	131.0	373.4	86.5	182.3	96.4	126.2		98.5	97.6	257.9
Roanoke	133.7	61.7	65.4	127.6	134.1	100.7	118.6	N.A.	97.2	296.9
Staunton	114.9	146.3	68.3	N.A.	69.1	101.0	N.A.	N.A.	95.2	231.7
Williamsburg	133.0	146.4	141.6	183.9	N.A.	156.8	N.A.	79.1	88.5	245.4
Winchester	144.7	339.2	N.A.	138.1	152.2	141.8	N.A.	N.A.	N.A.	N.A.

TABLE II January 1987 Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	December NON-AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	December RETAIL SALES ‡
The State		14.5	-33.8	2.0	0.6	-16.8	3.1	0.2	-0.9	-17.5
Alexandria	-4.2	65.3	873.8	4.9	N.A.	-8.3	3.3	2.8	-1.8	-24.7
Bristol	1.5	N.A.	-69.6	-7.5	16.5	-20.8	2.4	21.7	0.9	-3.6
Cape Charles - Exmore	-3.0	N.A.	-62.6	4.0	N.A.	-35.4	N.A.	13.2	-0.4	-1.3
Charlottesville	-6.2	16.9	-94.6	-3.0	N.A.	-40.0	5.3	-2.5	-2.5	-2.2
Danville	-9.6	N.A.	121.5	7.9	-5.7	-41.6	-0.3	-13.5	N.A.	-2.1
Franklin	-0.2	N.A.	90.5	6.8	8.7	4.1	N.A.	0.1	-2.4	-14.2
Fredericksburg	-5.3	26.8	-16.5	N.A.	3.6	-10.8	N.A.	5.2	-3.4	-25.1
Harrisonburg	-3.2	-3.6	231.7	N.A.	-2.2	-28.9	N.A.	-2.1	4.2	-2.1
Lynchburg	-8.6	15.6	-0.7	3.3	N.A.	-17.0	1.6	-12.0	-5.4	-28.1
Newport News - Hampton	-1.3	N.A.	-5.8	6.0	6.9	-1.7	2.5]	-1.5	-2.1	-16.0
Norfolk - Va. Beach - Portsmouth	0.4	-4.0	-59.7	0.4	0.7	-0.4		5.1	4.6	-18.4
Petersburg	-2.2	-31.9	-75.7	N.A.	N.A.	-27.9	2.2]	7.8	-0.1	4.5
Richmond	-7.1	14.6	65.3	-0.7	-4.6	-21.5		0.5	-6.0	-23.4
Roanoke	-7.0	-16.5	34.4	-2.6	-5.3	-38.1	0.7	N.A.	1.7	-15.4
Staunton	2.0	-11.5	-6.4	N.A.	-1.7	-37.0	N.A.	N.A.	15.2	4.9
Williamsburg	5.8	9.7	-59.2	3.4	N.A.	-15.7	N.A.	22.9	9.7	0.9
Winchester	-5.5	6.0	N.A.	2.5	13.2	-37.9	N.A.	N.A.	N.A.	0.3

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
] Only total MSA data are available for these areas

N.A. — Not Available
0.0 — No Change

this may not be all that easy. First, it is difficult to identify some risks without administering tests to virtually all persons. To know the level of serum cholesterol requires testing. Testing can be expensive, inexact, and if compulsory lead to serious personnel if not legal questions. Second, people identified as low risks do not always remain as such. Many overweight persons were once thin. Identifying persons as low-risk gives a false sense of security. Third, the fact that a person may be high-risk on one or more factors does not by itself mean that the person would eventually be victimized. This was graphically shown in a study in which less than 4 percent of the deaths in a particular group of men were of those men with three or more risk factors. In some cases, one factor alone was enough; for others as many as three was not enough. The existence of risk factors expresses a probability, not a certainty that the person would die, be disabled, or sick.

Furthermore, the study shows almost the entire population is at risk of exposure to one or more of these risk factors because many of them are environmental (air pollution) or cultural (dietary habits). Thus, the only effective preventive measure would be one that encompasses the entire workforce population rather than select groups.

This represents the dilemma that employers will face. In order to reduce their costs through preventive measures, do they reach out to their entire workforce and their families and into the off-work social behavior of their employees? Can they require employee participation? What are the employee's personal rights? In a social environment, it has long been accepted that society through laws has the right to restrict freedom of choice where the result of one's actions would be the imposition of significant harm or costs to others, or that individuals should gladly restrict their rights when the exercise of them is injurious to others. This is the social contract theory of democracy. Possible significant external effects on others also have been the justification for preventive measures such as environmental legislation or mandatory innoculation of the population to prevent epidemics of deadly diseases.

But, the imposition of preventive general health practices on individuals by employers, or employee groups, has no lofty theoretical basis. The balance between the social responsibilities and rights of such employers or employee groups versus the individual rights of dissenting employees has not been clearly determined. Another issue is the definition of significant external effects on others. Are employer costs sufficient evidence to justify action? If so, at what level? If risks to others in the workplace are the required evidence, how clearcut must the risks be before action is socially and legally acceptable?

These are not going to be easy questions to answer and will become more complex in the future. We can expect that the Supreme Court will eventually be called upon for an opinion. Does an employer have a right to interfere substantially in the off-duty health practices of an employee? Is there a choice? HJB

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Roy L. Pearson Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 319 March, 1987

Business In Virginia February, 1987 Data

New car registrations statewide plunged again in February, down 16.8 percent compared to February of 1986. That exactly matched January's decline; and, as in January, registrations fell in every urban area we cover except Franklin. The December surge in car buying definitely borrowed from 1987 purchases. The question still to be answered in the coming months is how much. When new car buying does return to a more normal level, however, we still expect that in most months it will be below the 1986 pace.

Building permits overall did post a 5.4 percent increase in February compared to last year, a much better performance than the 33.8 percent decline in January. However, a 5.4 percent rise remains anemic beside the 1986 annual average of 14.7 percent growth.

Electricity and water consumed both advanced far more strongly in February than January, indirect evidence that industrial production probably accelerated in Virginia in February. However, the weather has wrecked havoc with our 1987 data to date as well as the patterns of economic activity, so little can be said with confidence at this time.

The January nonagricultural employment figures now available reveal a 4.3 percent growth over last January, an encouraging sign of continuing overall momentum in Virginia's economy. We also received the new benchmark payroll employment data for 1985 and 1986 from the Virginia Employment Commission - those are reported in our feature article this month. The revisions show Virginia's nonagricultural employment grew by 4.2 percent in 1986, instead of the 3.8 percent we reported last month based on preliminary data. Most areas of the Commonwealth shared in the healthy job growth, with the exception of Danville and Lynchburg. The revisions substantially reduced the Lynchburg figures, yielding a final 1986 percentage change of -0.4 percent.

Our sample of retail stores recorded a February gain of 5.4 percent in sales per store, a significant rebound from the 0.9 percent decline in January. However, total taxable sales data for February, which will not be available until April, are unlikely to reflect that much strength.

Our major problem for this month was how to even report, much less interpret, the January changes in Virginia taxable sales as reported by the Department of Taxation. Individual retailers remit their sales taxes to this department in the month following the month in which the sales occurred. Therefore the sales tax records and payments for December were due in the third week in January. The statewide snowstorms at that time delayed receipt of those reports from many retailers, producing a drop of 17.8 percent in sales tax receipts for December sales. From the Bureau's sample of retail merchants and other reports, we know retail sales actually were up significantly in December, not down. The weather-related problems in the taxable sales data were compounded for January, since the delayed receipts from December sales were counted in February along with the receipts for January sales. That generated spectacular increases in the Department of Taxation's *recorded* sales tax receipts for January sales, for three areas over 75 percent! Yet the implied gains in January taxable sales were predominantly a weather produced statistical aberration. Our sample of retailers reported a decline in January sales. In sum, the Department's figures shifted some of the huge volume of December taxable sales to the normally low seasonal sales in January, and made the taxable sales data for each month unrealistic.

Rather than show the January taxable sales data and then warn that it did not represent actual retail trade activity, we decided to take a different approach. The last column in Table II, which normally is the latest *monthly* Virginia taxable sales data available, is in this issue the *average* percentage gain for December and January combined, compared to the same two months a year ago. That December-January average shows an 11.2 percent rise. For comparison, the nationwide December-January gain in retail trade excluding the automobile group was only 4.6 percent. Virginia's retail trade did maintain above-average strength across the first two months of winter. RLP

Chart I
Nine Selected Business & Economic Indicators Percentage Change

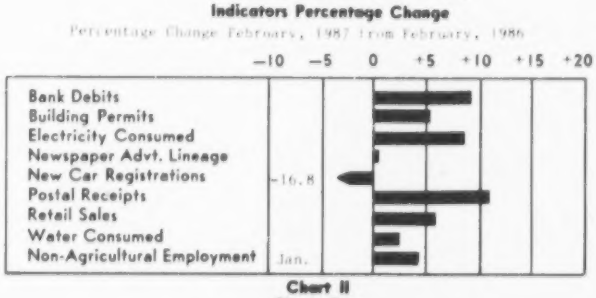
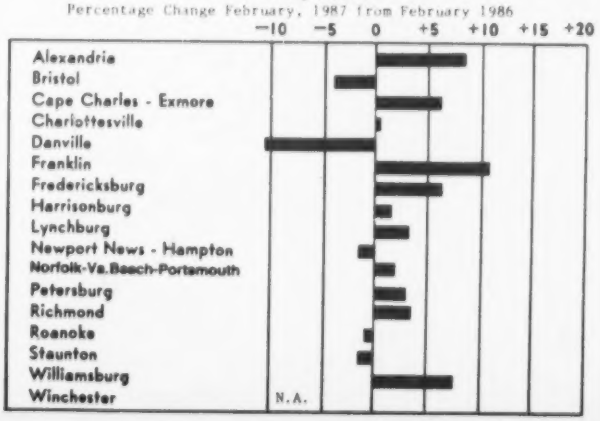


Chart II
City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I February, 1987

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1967) - Base Period = 100

CITY	CITY INDEX *	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	Jan. NON AGRI CULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		285.0	140.1	170.8	79.6	117.2	135.0	80.6	168.6	400.8
Alexandria	145.3	416.1	230.3	202.4	N.A.	103.6	178.3	84.3	149.5	N.A.
Bristol	129.7	N.A.	24.7	134.0	72.3	66.1	109.5	105.3	125.1	305.0
Cape Charles - Exmore	110.2	N.A.	144.7	146.3	N.A.	45.5	N.A.	N.A.	96.6	181.7
Charlottesville	160.0	270.5	68.4	171.0	N.A.	76.0	106.1	108.1	178.1	284.7
Danville	141.7	N.A.	52.4	106.6	90.2	46.5	96.5	75.4	N.A.	435.1
Franklin	130.0	N.A.	68.4	149.0	105.3	95.1	N.A.	91.4	107.9	277.1
Fredericksburg	279.3	467.9	52.4	N.A.	141.0	153.0	N.A.	58.1	164.8	1168.7
Harrisonburg	146.3	210.3	68.4	N.A.	101.4	67.2	N.A.	134.6	131.6	326.3
Lynchburg	259.6	350.2	432.3	146.4	N.A.	72.7	97.4	105.5	177.9	1121.3
Newport News - Hampton	126.4	N.A.	61.0	145.7	77.4	71.5	133.7	102.3	160.3	N.A.
Norfolk - Va. Beach - Portsmouth	150.7	89.8	327.7	159.9	80.1	88.3	]	76.0	219.2	N.A.
Petersburg	140.0	135.2	185.6	N.A.	N.A.	48.4	125.9	86.8	160.1	238.9
Richmond	148.5	263.3	130.5	197.9	96.7	91.6	]	91.7	127.7	340.4
Roanoke	146.8	333.5	77.8	123.3	128.4	65.2	120.6	90.0	154.8	329.6
Staunton	109.8	127.9	36.4	N.A.	70.5	58.3	N.A.	N.A.	92.2	253.6
Williamsburg	155.0	142.4	92.3	206.8	N.A.	101.7	N.A.	70.9	113.3	365.4
Winchester	N.A.	278.7	202.7	158.6	N.A.	82.3	N.A.	N.A.	N.A.	N.A.

TABLE II February, 1987

Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	January NON AGRI CULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	Average Dec.-Jan. RETAIL SALES ‡
The State		9.1	5.4	8.7	0.3	-16.8	4.3	2.3	5.4	11.2
Alexandria	8.2	47.6	167.5	19.0	N.A.	-9.8	5.0	6.1	10.8	12.5
Bristol	-4.1	N.A.	83.7	-1.8	-1.0	-30.9	2.0	3.6	-9.7	20.1
Cape Charles - Exmore	5.8	N.A.	5.7	9.9	N.A.	-4.4	N.A.	18.9	0.9	13.3
Charlottesville	0.6	34.3	-41.7	13.4	N.A.	-40.0	3.8	5.0	3.9	11.0
Danville	-4.2	N.A.	-85.8	6.6	-0.4	-36.7	1.3	-1.8	N.A.	5.7
Franklin	10.4	N.A.	-67.9	12.3	7.9	26.1	N.A.	1.5	-5.9	53.2
Fredericksburg	6.4	37.5	204.3	N.A.	10.0	-3.3	N.A.	8.3	6.7	9.4
Harrisonburg	1.6	-1.2	128.3	N.A.	0.5	-33.9	N.A.	6.8	7.7	15.0
Lynchburg	3.0	-9.4	-13.7	4.8	N.A.	-22.9	1.3	-14.7	4.0	14.0
Newport News - Hampton	-2.0	N.A.	-10.9	-1.2	1.9	-23.4	2.7	2.5	-3.1	8.7
Norfolk - Va. Beach - Portsmouth	1.8	-4.0	8.4	-8.0	-0.3	-19.4	]	3.5	8.7	11.3
Petersburg	2.8	-34.4	-0.8	N.A.	N.A.	-22.4	4.1	2.8	6.3	15.9
Richmond	3.3	12.8	12.7	17.2	-2.5	-12.2	]	3.9	5.0	4.3
Roanoke	-0.7	-13.3	56.9	1.8	1.3	-22.5	3.0	3.4	1.1	3.3
Staunton	-1.5	7.0	197.4	N.A.	-4.9	-19.9	N.A.	N.A.	0.4	14.9
Williamsburg	7.5	16.4	-21.9	18.3	N.A.	-20.0	N.A.	0.1	14.4	10.7
Winchester	N.A.	-3.9	N.A.	3.6	N.A.	-35.0	N.A.	N.A.	N.A.	21.3

TABLE III

Percentage Change January - February from same period last year

CITY	CITY INDEX *	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	Jan.-Dec. 1986 NON AGRI CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	Jan.-Dec. 1986 RETAIL SALES ‡
The State		-0.5	-17.8	5.3	-0.6	-16.8	4.2	1.1	2.4	5.4
Alexandria	3.2	-36.1	399.1	11.8	N.A.	-9.0	6.6	4.4	4.0	5.6
Bristol	-3.3	N.A.	-36.0	-4.7	7.3	-26.2	3.8	12.9	-4.7	6.6
Cape Charles - Exmore	-2.6	N.A.	-26.2	6.9	N.A.	-39.8	N.A.	15.8	0.5	6.1
Charlottesville	-5.3	-19.8	-78.5	5.3	N.A.	-40.0	2.5	1.1	0.6	9.1
Danville	-11.2	N.A.	-34.8	7.3	-3.1	-40.5	0.0	-8.3	N.A.	3.6
Franklin	2.7	N.A.	-48.5	9.4	8.3	12.5	N.A.	0.8	-4.1	-8.7
Fredericksburg	1.8	-24.1	94.5	N.A.	6.8	-7.4	N.A.	6.6	1.5	7.9
Harrisonburg	-2.0	2.6	190.7	N.A.	-0.8	-31.3	N.A.	2.5	5.8	12.3
Lynchburg	-4.9	-4.0	-5.7	4.1	N.A.	-19.7	-0.4	-13.3	-0.1	5.6
Newport News - Hampton	-2.0	N.A.	-8.7	2.2	4.6	-13.0	3.9	0.4	-2.7	4.9
Norfolk - Va. Beach - Portsmouth	1.7	4.2	-36.5	-3.7	0.2	-9.4	]	4.3	6.8	5.7
Petersburg	2.1	49.5	-58.9	N.A.	N.A.	-25.6	3.0	5.4	3.3	4.7
Richmond	-1.5	1.8	41.9	7.9	-3.5	-17.3	]	2.1	0.1	-0.8
Roanoke	4.7	15.9	32.6	-0.4	-4.9	-31.0	3.5	-0.7	1.4	7.4
Staunton	-1.9	3.3	57.2	N.A.	-3.4	-29.8	N.A.	N.A.	7.9	7.8
Williamsburg	5.5	-11.3	-35.1	10.6	N.A.	-17.6	N.A.	12.4	9.2	-6.9
Winchester	N.A.	-1.4	N.A.	3.1	N.A.	-36.5	N.A.	N.A.	N.A.	14.1

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
] Only total MSA data are available for these areas

N.A. — Not Available
O.O. — No Change

Employment Growth in Virginia, 1986

Don Wood, Bureau Research Staff

The Virginia Employment Commission (VEC) has completed its annual revision of nonagricultural employment statistics. Table IV shows the 1986 nonagricultural employment levels for the state as a whole, the sum of all nonmetropolitan areas, the sum of the eight designated MSAs, and each individual metropolitan area. Each of these geographic breakouts is given for nine industry groups and the state total. The rows of the chart illustrate the employment mix of each area, while the columns show the geographic concentration of each industry category.

Table V provides the 1985 to 1986 growth rates for nonagricultural employment based on the VEC's revised data for both years. It is structured like Table IV, and can be used to identify growth patterns by industry category and geographic area.

Relatively strong job growth continued in the Commonwealth during 1986. Total nonagricultural employment growth was 4.2%, an increase of 102,400 jobs. While down from the exceptionally high 5.7% rate in 1985 and 4.9% in 1986, this rate continues to represent a healthy expansion. The increase in individual jobs during 1986 was roughly equivalent to adding a metropolitan area twice the size of Charlottesville to the state's economy.

The industries with the highest historical growth in recent years again led the way in 1986. The largest percentage increase was in the Construction sector with 10.6% growth, followed by Finance, Insurance, and Real Estate with 6.5%, Services with 6.3%, and Wholesale and Retail Trade with 6.1%. Considering numbers of new jobs created, the Service industry led the way with 34,300 jobs. Wholesale and Retail Trade added 33,200, while the Construction sector contributed 16,200. Transportation and Public Utilities employment increased by 4% or 5,300 jobs, while State and Local Governments hired 5,500 new workers for an increase of 1.6%. Manufacturing jobs, in both durable and nondurable goods, remained steady during 1986. The only employment decrease in any industry was the Federal Government sector, which declined by 0.1% during 1986. Attempts at deficit reduction have eliminated some marginal employment in this sector, and further declines are possible.

Nonagricultural employment growth has been concentrated in the state's urban areas throughout the current expansion, and 1986 was no exception. Virginia's eight MSAs include the place of employment for 75.1% of the

NONAGRICULTURAL EMPLOYMENT IN VIRGINIA

TABLE IV

Average Employment in Thousands, 1986

	Total Non-Agricultural Employment	Durable Goods Manufacturing	Nondurable Goods Manufacturing	Construction	Transportation and Public Utilities	Wholesale and Retail Trade	Finance Insurance and Real Estate	Services	Federal Government	State and Local Government
The State	2,557.1	201.1	223.1	168.1	137.3	580.2	130.8	579.0	168.0	353.0
Nonmetro Areas	637.7	70.7	108.5	42.9	28.0	124.4	17.3	115.9	17.2	97.6
Sum of MSAs	1,919.4	130.4	114.6	125.2	109.3	455.8	113.5	463.1	150.8	255.4
Northern Virginia	655.2	20.7	13.8	47.3	45.4	152.9	40.0	198.1	73.0	63.6
Bristol	29.9	4.9	4.5	0.9	1.1	8.0	0.9	4.4	0.4	4.7
Charlottesville	62.2	5.6	3.0	3.4	2.1	11.9	3.0	10.9	1.3	20.9
Danville	38.9	3.1	13.3	1.4	1.0	8.1	1.2	5.7	0.3	4.8
Lynchburg	70.1	15.2	8.7	3.1	2.9	13.2	3.3	13.9	0.5	9.2
Hampton Roads	530.6	50.6	18.4	37.4	25.7	129.7	24.1	119.9	55.5	69.3
Richmond/ Petersburg	415.0	18.2	44.4	25.0	22.1	100.6	31.1	83.6	16.4	71.2
Roanoke	117.5	12.1	8.5	6.7	9.8	31.4	7.9	26.6	3.4	11.7

TABLE V

Employment Percentage Change, 1985-1986

	Total Non-Agricultural Employment	Durable Goods Manufacturing	Nondurable Goods Manufacturing	Construction	Transportation and Public Utilities	Wholesale and Retail Trade	Finance Insurance and Real Estate	Services	Federal Government	State and Local Government
The State	4.2	0.0	0.3	10.6	4.0	6.1	6.5	6.3	-0.1	1.6
Nonmetro Area	3.8	-0.1	0.6	15.3	6.1	9.0	4.2	2.5	-6.5	0.4
Sum of MSAs	4.3	0.0	0.0	9.1	3.5	5.3	6.9	7.3	0.7	2.0
Northern Virginia	6.6	5.6	13.1	11.6	7.1	7.9	9.6	9.2	0.4	1.9
Bristol	3.8	0.0	2.3	-25.0	0.0	6.7	-10.0	15.8	0.0	4.4
Charlottesville	2.5	-6.7	-9.1	0.0	0.0	4.4	0.0	6.9	8.3	4.0
Danville	0.0	3.3	-5.0	0.0	11.1	-3.6	20.0	7.5	0.0	2.1
Lynchburg	-0.4	-4.4	-3.3	14.8	0.0	-0.8	0.0	6.1	0.0	-3.2
Hampton Roads	3.9	0.0	2.8	10.7	2.0	4.3	5.7	5.1	-0.4	4.2
Richmond/ Petersburg	3.0	0.0	-1.6	6.8	1.4	3.8	4.7	6.8	5.1	0.4
[illegible]	3.5	0.0	-2.3	3.1	-2.2	6.8	12.9	4.7	3.0	0.0

state's workers. Employment within these urban areas increased by 4.3% in 1986, compared to a 3.8% increase for the sum of all nonmetropolitan areas. The gap between the metroplitan area and nonmetropolitan area growth rates is diminishing somewhat, however. In 1985 the nonmetro growth rate was only 2.3% versus 5.8% for the metro areas, and growth in the eight MSAs was responsible for almost 90% of the state's employment increase. Nonmetro areas surpassed urban growth only in Durable Goods Manufacturing and Federal Government employment that year. In 1986 the urban areas contributed a lower 77.1% of the overall growth. The nonmetro areas' growth rates led in the Construction, Transportation and Public Utilities, and Wholesale and Retail Trade sectors.

The largest metropolitan areas have continued to show impressive growth. The large economic base of these MSAs should allow them to have the highest increases in number of jobs, even though the overall metropolitan growth rate is slowing. Northern Virginia, the Commonwealth's largest MSA with over 655,000 jobs, also had the highest percentage increase, 6.6%, in 1986. However, it was the only MSA to grow at a rate higher than the state average. While producing 40,600 new nonagricultural jobs, it led the state in employment growth rates in the Durable and Nondurable Manufacturing sectors and had relatively strong increases in Wholesale and Retail Trade, Finance, Insurance and Real Estate, and Services. Northern Virginia's overall balanced growth across private industry categories produced almost 40% of the total statewide employment increase.

The Hampton Roads MSA has traditionally been the state's center of Durable Goods Manufacturing, largely because of the presence of Newport News Shipbuilding, the state's largest employer. Employment in the Durable Goods sector remained flat in 1986, however, partly offsetting the area's increases in other industry categories. Overall employment in Hampton Roads grew by 3.9%, led by 10.7% growth in Construction and 5.7% growth in Finance, Insurance, and Real Estate. Slight declines were recorded in the Federal Government sector, but the number of jobs available increased in all other categories.

The Commonwealth's next largest MSA is Richmond-Petersburg, which posted a 3% rate of growth for 1986. The Construction and Service sectors both grew at a strong 6.8%, while Federal Government and Finance, Insurance, and Real Estate employment followed at 5.1 and 4.7%, respectively. This MSA is the state's center of Nondurable Goods Manufacturing. A decrease of 1.6% in this sector and flat Durable Goods Manufacturing employment levels served to check Richmond-Petersburg's overall job growth.

Employment in the Roanoke MSA grew by 5.2% in 1985, exceeding the statewide level of growth. This rate of expansion began to slow in 1986, however, as the area's employment level grew at an overall 3.5% rate. High growth did take place in Finance, Insurance, and Real Estate (12.9% increase) and Wholesale and Retail Trade (6.8%). Constant employment in Durable Goods Manufacturing and decreases in Nondurable Goods Manufacturing (-2.3%) and Transportation and Public Utilities (-2.2%) prevented Roanoke from again posting a rate of growth above the state average.

Among the four smaller MSAs, the Bristol area had the highest growth *rate*, 3.8 percent, fueled by a 15.8 percent gain in Services employment and 6.7 percent in the Trade sector. Charlottesville's lower growth rate, 2.5 percent, added more new jobs, however: 1,500 versus 1,100 for Bristol. The Charlottesville MSA employment growth was dampened by job losses in both Durable Goods and Nondurable Goods Manufacturing, while its major source of strength was new jobs in the Services sector. The Danville metro area held its ground, with no year-to-year change in the average number of payroll jobs. The Lynchburg area was the only MSA recording a decline in nonagricultural employment – the revised figures erased a gain shown in preliminary data. Lynchburg achieved good gains in Construction and Services sector employment, but continued declines in Manufacturing jobs prevented overall growth. Both Danville and Lynchburg have far above average dependence on Manufacturing jobs, so both should benefit substantially from some renewed strength in U.S. manufacturing.

The state's four largest MSAs, Northern Virginia, Hampton Roads, Richmond-Petersburg, and Roanoke, accounted for 76,300 new jobs and almost 75% of the total statewide increase in 1986, compared to 97,500 new jobs and 85% in 1985. While this illustrates a continued concentration of net gains in the *number* of employees in the state's largest urban areas, the gap is widening more slowly than in recent years as the growth *rates* in nonmetropolitan Virginia accelerate. DW

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Roy L. Pearson, Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 320 **April, 1987**

Business In Virginia March, 1987 Data

One way to get a perspective on the percentage changes shown in any issue is to compare them to the changes reported in the same monthly issue last year. If you had our April 1986 Report in front of you, you could compare the tables to those in the current Report to see whether the 1986-1987 growth rates have been higher or lower than the 1985-1986 rates. We have done that, and will share our observations with you.

Most recent month. Seven of the nine statewide indicators in Table II reveal lower growth rates than experienced a year ago. These are electricity consumed, newspaper advertising linage, new car registrations, nonagricultural employment, water consumed, March retail sales based on our sample of retail stores, and February retail sales based on sales tax receipts. Only bank debits (checking account spending) and building permits recorded higher gains from March 1986 to March 1987 than they did from March 1985 to March 1986. For bank debits, the current percent change was 24.6 percent versus 20.2 percent a year ago. For building permits, the current change was 8.1 percent compared to 1.3 percent last year. The higher growth in building permits this March is welcome news. However, it follows a large decline in January and a smaller rise in February, so the cumulative 1987 result is a lower dollar volume of building permits than in the first quarter of 1986.

All except one indicator did record some growth in March, but the March data generally reveal slower growth than the Commonwealth was experiencing at this time last year. The one declining series was retail sales by our sample of stores, down 0.5 percent. A major factor behind this slight drop is the shift in Easter from March in 1986 to late April in 1987. That shift caused March sales last year to be unusually high in many areas, returning to a more normal pattern this year. Therefore the mild decrease this March in retail sales is not surprising and it should be followed by solid growth in April.

First quarter. The cumulative results for the first quarter, in Table III, also show a pattern of slower growth. As already mentioned, building permits were down in the first quarter of 1987 (1987:1), -8.4 percent. In 1986, the first quarter increase was 6.1 percent.

For 1987:1, new car registrations fell 10.6 percent compared to 1986:1. Last year they were booming, up 15.4 percent in the first quarter. The declines in building permits and new car sales are partially a temporary lull following the yearend surge in 1986. We continue to predict however that both of these indicators will be lower for the year.

Most of the other indicators grew more slowly in 1987:1 than in 1986:1. The growth rates for this year's first quarter versus the 1986:1 rates are: bank debits, 8.7 percent versus 18.0 percent; electricity consumed, 5.6 versus 8.1; newspaper advertising linage, 0.4 versus 3.7; and retail sales of our sample of stores, 1.3 versus 2.7.

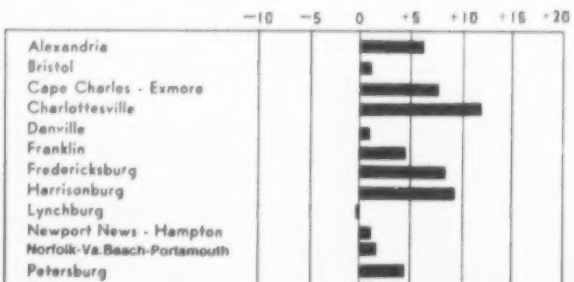
For two indicators we only have data through February: nonagricultural employment and retail sales based on Department of Taxation sales tax receipts. For January and February combined, nonagricultural

Chart I

Nine Selected Business & Economic Indicators Percentage Change

Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I March 1987

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX *	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	February NON AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		364.2	221.2	156.9	102.8	155.8	134.5	85.5	190.8	377.3
Alexandria	156.8	447.4	1065.4	171.9	N.A.	130.7	178.0	83.8	177.8	N.A.
Bristol	140.5	N.A.	57.3	120.9	78.1	87.9	109.9	90.5	136.3	368.7
Cape Charles - Exmore	129.8	N.A.	161.9	138.6	N.A.	82.1	N.A.	N.A.	121.5	193.6
Charlottesville	176.8	317.9	747.5	156.6	N.A.	126.3	105.6	117.9	188.3	363.2
Danville	120.1	N.A.	66.2	107.8	125.9	75.5	96.0	78.3	N.A.	237.0
Franklin	142.1	N.A.	118.6	135.3	138.4	119.7	N.A.	101.4	136.6	232.4
Fredericksburg	292.5	207.3	198.5	N.A.	165.3	184.5	N.A.	62.6	212.2	998.6
Harrisonburg	163.1	275.3	778.4	N.A.	1[illegible].3	102.2	N.A.	122.4	153.6	317.3
Lynchburg	225.5	403.6	389.2	139.1	[illegible]A.	85.2	97.1	111.0	179.0	832.5
Newport News - Hampton	116.8	N.A.	315.9	135.1	87.2	101.0	133.5]	112.1	121.8	N.A.
Norfolk - Va. Beach - Portsmouth	147.6	302.4	271.0	175.1	95.1	109.0		82.4	195.2	N.A.
Petersburg	132.1	166.0	171.4	N.A.	N.A.	69.3	125.3]	104.0	128.1	241.5
Richmond	146.3	483.8	N.A.	172.1	129.4	125.2		92.6	111.9	336.3
Roanoke	161.3	387.0	96.2	117.9	165.7	77.1	120.0	102.4	172.9	349.9
Staunton	139.5	148.6	17.8	N.A.	89.5	74.1	N.A.	N.A.	125.1	298.0
Williamsburg	165.2	173.2	47.5	173.5	N.A.	113.6	N.A.	76.5	148.4	347.7
Winchester	125.0	372.5	72.8	147.2	87.7	140.2	N.A.	N.A.	N.A.	N.A.

TABLE II March 1987

Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE #	NEW CAR REGISTRATIONS	February NON AGRICULTURAL EMPLOYMENT	WATER CONSUMED	RETAIL SALES †	February RETAIL SALES ‡
The State		24.6	8.1	6.2	2.1	1.8	3.9	0.2	-0.5	21.0
Alexandria	6.4	33.4	747.9	7.3	N.A.	4.2	5.0	-7.6	7.6	19.4
Bristol	1.0	N.A.	-68.5	-0.6	-4.1	0.6	3.4	18.2	-5.0	6.3
Cape Charles - Exmore	8.8	N.A.	-65.2	10.8	N.A.	-6.5	N.A.	28.8	-2.6	36.2
Charlottesville	12.1	39.6	96.5	14.5	N.A.	16.4	4.0	2.2	5.7	42.8
Danville	0.9	N.A.	-33.7	7.0	6.5	-19.4	2.1	6.2	N.A.	3.2
Franklin	4.8	N.A.	-11.6	9.8	0.5	-8.8	N.A.	6.3	-4.2	43.5
Fredericksburg	8.6	48.4	121.3	N.A.	7.2	14.9	N.A.	5.5	-3.6	43.3
Harrisonburg	9.2	5.0	32.9	N.A.	-0.2	1.0	N.A.	16.8	3.0	41.7
Lynchburg	-0.1	-19.1	179.6	4.1	N.A.	-19.9	1.3	0.7	-3.3	23.1
Newport News - Hampton	1.2	N.A.	-56.1	5.1	-1.0	3.3	2.3]	-3.2	-5.2	20.1
Norfolk - Va. Beach - Portsmouth	1.6	6.0	3.9	5.8	0.7	-2.3		5.4	-1.9	14.0
Petersburg	4.8	-14.2	-37.2	N.A.	N.A.	7.2	3.8]	7.4	-4.2	27.7
Richmond	1.5	36.0	N.A.	6.7	8.8	8.5		-7.5	-9.4	21.3
Roanoke	0.9	-11.9	117.3	2.3	-1.8	-11.0	2.9	3.6	2.9	3.6
Staunton	10.4	10.4	210.5	N.A.	-0.5	-18.0	N.A.	N.A.	15.6	34.0
Williamsburg	0.4	14.0	-62.9	6.0	N.A.	-22.5	N.A.	-0.6	0.7	18.0
Winchester	16.4	16.6	4.8	5.5	4.8	-2.5	N.A.	N.A.	N.A.	57.8

TABLE III

CITY	CITY INDEX *	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	Jan.-Feb. NON AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	Jan.-Feb. RETAIL SALES ‡
The State		8.7	-8.4	5.6	0.4	-10.6	4.1	0.9	1.3	14.7
Alexandria	5.3	47.8	571.9	10.4	N.A.	-4.5	5.1	0.2	5.5	15.0
Bristol	4.0	N.A.	-60.0	-3.4	3.1	-17.5	3.3	14.4	-4.8	15.2
Cape Charles - Exmore	3.0	N.A.	-54.5	8.2	N.A.	-28.0	N.A.	20.0	-0.5	22.2
Charlottesville	1.5	29.8	8.5	8.8	N.A.	-30.9	3.9	1.5	2.3	21.4
Danville	3.4	N.A.	34.6	7.2	0.6	-32.8	1.7	-2.0	N.A.	4.8
Franklin	7.4	N.A.	-35.4	9.5	5.1	4.0	N.A.	2.7	-4.1	49.8
Fredericksburg	5.2	37.5	101.0	N.A.	6.9	-0.4	N.A.	6.2	0.5	22.5
Harrisonburg	3.3	0.2	104.1	N.A.	-0.5	-21.3	N.A.	6.8	4.8	23.5
Lynchburg	-1.4	-4.5	73.9	4.1	N.A.	-19.8	1.4	-9.0	-1.6	16.9
Newport News - Hampton	0.1	N.A.	-33.8	3.1	2.6	-7.6	2.5]	-0.9	-3.7	12.6
Norfolk - Va. Beach - Portsmouth	2.1	-0.7	-22.7	-0.7	0.4	-7.1		4.7	2.4	12.3
Petersburg	2.2	-27.2	-52.0	N.A.	N.A.	-15.6	3.9]	6.1	0.3	19.9
Richmond	0.2	10.4	N.A.	7.5	1.1	-8.7		-1.3	-3.8	10.4
Roanoke	1.6	-12.8	59.4	0.4	-3.7	-24.6	2.9	0.8	2.0	3.4
Staunton	4.3	1.4	135.4	N.A.	-2.3	-25.8	N.A.	N.A.	10.7	21.5
Williamsburg	5.0	13.2	-41.8	10.0	N.A.	-19.3	N.A.	8.0	7.8	13.1
Winchester	3.9	6.6	56.2	3.9	N.A.	-24.7	N.A.	N.A.	N.A.	32.5

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
⊐ Only total MSA data are available for these areas

N.A. — Not Available
0.0 — No Change

employment rose 4.1 percent compared to a 5.1 percent gain in the same period last year. Thus job growth has slipped by one percentage point; and we predict it will decelerate by one more point, to about 3.0 percent, for the year. Taxable sales reports show a January- February increase of 14.7 percent versus 11.5 percent last year, the only indicator for which the early 1987 growth rate exceeds the early 1986 one. The snow-related delays in reporting by many businesses however caused some 1986 sales to be counted in 1987, overstating the 1987 sales. Therefore the reported growth in taxable sales this year is partly an illusion, not representing actual 1987 sales.

The Virginia economy remains strong, much stronger than in most other states. But our growth is continuing to slow as the expansion here matures. RLP

Virginia – Up Where You Belong

A surge in growth in the 1980s has propelled the Virginia economy into the upper ranks among states.

The recent rise in Virginia's fortunes is not luck. It is the culmination of years of steady, superior growth as Virginia's people and a responsive government forged a highly diversified industrial base with the skills and flexibility to meet today's economic challenges.

Look back for a moment to 1960. At that time, Virginia's personal income per person was only 85 percent of the national average, barely bringing it within the upper two-thirds among states. Our superior growth began in the sixties, but we had a long way to go. By 1970, Virginia's income per person stood at 94 percent of the national average. We had passed seven other states, but still had not penetrated the top one-half. We still were second-tier, in most non-Virginian's eyes.

Steady growth served the state well during the turbulent 1970s. In 1974, Virginia's per capita income passed that of Florida, moving us into first place among the twelve southeastern states. We have held that position ever since. By 1980, Virginia had outdistanced eight more states; but its per capita income remained only 99 percent of the national average, leaving it outside of a top one-third ranking.

Then Virginia's takeoff began. Between 1980 and 1985, Virginia personal income per capita rose 48 percent, compared to only 40 percent nationwide. That surge pushed Virginia's income per person to 105 percent of the national average. Virginia income per capita of $14,542 in 1985 ranked us in eleventh place among the fifty states.

We have come a long way. In 1960 we were poor, with average income 15 percent below the national level. In 1985 our average income was 5 percent above the average. That has changed how we live and what we buy. It also has created bountiful business opportunities to meet Virginians' new demands.

What has been happening in the 80's? In the recession year of 1982, the nation's real output *fell* 2.5 percent. Virginia's real output *rose* 1.5 percent, with particularly large gains in finance, insurance, real estate, and services, plus increases in retail trade.

In 1983, all sectors of Virginia's economy pushed ahead except farming, mining, and state and local government.

Then came 1984, when the nation's real output jumped by 6.5 percent, the largest increase since 1951. Did Virginia get left behind? No! Virginia responded with an 8 percent rise in real output, again leaving the nation at large behind.

Farming and mining grew strongly in Virginia that year, and local governments increased their services. Construction continued the boom begun in 1983, with a 14 percent gain (adjusted for inflation) in 1984. All private business sectors achieved good growth. The only no-growth segment of Virginia's economy in 1984 was state government. The strong overall rise in state output produced a 5.7 percent increase in nonagricultural employment, marking 1984 as the year of job growth in Virginia. That 5.7 percent increase meant we added 126,000 more payroll employees that year alone.

In 1985 Virginia's growth slowed, but only modestly. The State's gross output, in real terms, rose 5.2 percent. Nonagricultural payroll employment also increased by 5.2 percent, adding another 120,000 new payroll jobs. The real output growth included a strong 24 percent gain in farm output; another strong year in construction, up 11 percent; and real growth of six percent in trade, services, and the finance-insurance-real estate sector. For comparison, nationally real output rose by only 2.7 percent, while payroll jobs grew by 3.3 percent.

The cumulative 1980-1985 result was an increase of 298,000 jobs in the Commonwealth, a 14 percent increase, more new jobs than existed in 1980 in the entire Norfolk-Virginia Beach-Portsmouth metropolitan area. That helps to explain the Commonwealth's construction boom – we literally have been building new cities, to provide the needed workplaces as well as homes for these new employees.

Last month we reported the revised 1986 nonagricultural employment data for Virginia. The average number of payroll jobs in 1986 was 2,557,100, an increase of 4.2 percent from 1985. That represents a net addition of 102,000 nonagricultural jobs.

The Federal government released preliminary estimates for 1986 income by states on April 16. The estimated 1986 personal income of Virginia residents was $88,970 million, up 7.2 percent over 1985. That brought Virginia's income per capita to $15,374, an increase of 5.4 percent from 1985. Nationwide, per capita income rose by only 4.3 percent, to $14,461. Therefore we picked up another point relative to the nation – our income per person now is 106 percent of the national average. We also moved up relative to other states. Our income per capita now is the tenth highest among the fifty states. That 'top ten' ranking puts Virginia up where we belong.

Virginia's superior perfomance is not over. Our growth is decelerating gradually but remains better than the nation's. We have revised our 1987 forecasts

for Virginia, marginally increasing the projected income and employment growth rates from those given in the November 1986 issue. Our current prediction is Virginia's total income will grow by 6.5 percent in 1987 and payroll employment will rise by 3.0 percent, a net gain of 77,000 jobs. For comparison, personal income nationally is expected to increase only 4.5 percent; and nonagricultural employment, only 2.5 percent. Virginia's continued above-average growth in 1987 will confirm and strengthen our top ten ranking among states. RLP

TABLE IV

VIRGINIA ECONOMY UPDATE
ACTUAL VALUES FOR 1986 AND
REVISED FORECASTS FOR 1987

	1986		1987	
	Level	Percent Change	Level	Percent Change
Resident Personal Income ($mills.)	$88,970	7.2%	$94,750	6.5%
Nonagricultural Employment (thous.)	2,557.1	4.2%	2,634	3.0%
Manufacturing	424.2	0.2	435	2.5
Mining	16.4	-5.2	16	-2.5
Construction	168.1	10.6	161	-4.2
Private Trade and Services	1,427.3	6.0	1,492	4.5
Government	521.0	1.0	530	1.7

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Roy L. Pearson Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 321 May, 1987

Business In Virginia April, 1987 Data

Last month we reported the state's first quarter quarter 1987 performance compared to the first quarter 1986: declines in building permits and new car registrations and generally slower growth rates in other economic indicators such as payroll employment, retail sales, and total spending.

April data reveal continuing declines in building permits, down 16.8 percent from April 1986, and new car registrations, down 1.9 percent. Retail sales by our sample of stores accelerated to a 4.5 percent gain over last April, buoyed by Easter sales. Total spending, as evidenced by bank debits, also showed a strong April increase, up 23 percent statewide. The cumulative 1987 results reported in Table III, however, confirm the economic picture described last month.

This month we will focus on some of the local areas where economic developments differ substantially from the state averages.

Northern Virginia's job growth has slowed far more dramatically than the state's, moving from 9.4 percent in the first quarter of 1986 to 5.0 percent during the first quarter of 1987. Five percent payroll job growth, however, still is the highest rate among the Commonwealth's eight Metropolitan Statistical Areas(MSAs) and a point above the state average of 4.0 percent. The building boom also is continuing there, with a 403 percent increase in building permits through April. On the other hand, retail sales growth is merely tracking the statewide performance.

In the Hampton Roads area, payroll job growth during the first quarter was 2.3 percent, less than one-half of the 5.8 percent rise in the first quarter of 1986. Building permits through April are down on both sides of the James River by more than the state average, while retail sales gains remain about average in the overall MSA.

Meanwhile, the first quarter payroll employment growth rates of 4.0 percent in Charlottesville and 3.9 percent in the Richmond-Petersburg MSA are in each case above the first quarter 1986 rates, pointing to a rising contribution to state growth from these areas. Job growth rates in Danville and Lynchburg remain low, 1.5 and 1.6 percent respectively, but those growth rates are an improvement compared to the same period last year. Steadily increasing job growth in these two MSAs should bring them more in line with the state average as 1987 progresses.

Areas other than the eight MSAs have become the growth leaders by most measures. The Fredericksburg area is the 1987 leader so far, with strong growth in retail sales, total spending, and building permits along with a below-average decrease in new car registrations. The area's current economic strength is a continuation of an exceptional 1986 performance.

Another booming area is the Shenandoah Valley, from Staunton through Harrisonburg to Winchester. Building permits through April have risen more strongly this year than last in those localities, showing a continuing construction boom. Retail sales growth

Chart I

Nine Selected Business & Economic Indicators Percentage Change

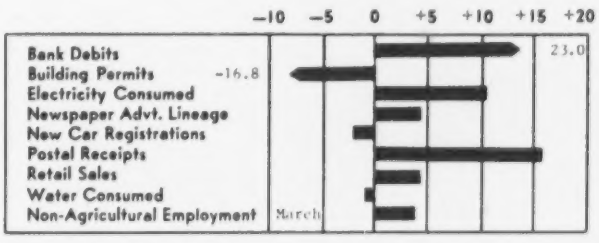
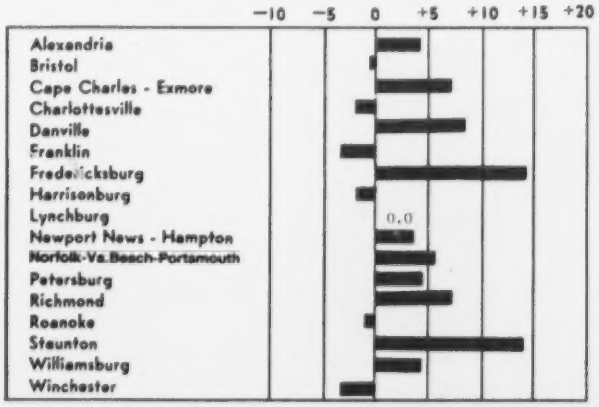


Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I April 1987

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		428.9	178.6	136.8	115.7	159.2	135.8	89.7	155.4	383.9
Alexandria	155.8	1178.1	147.5	147.0	N.A.	128.3	179.7	92.5	181.0	N.A.
Bristol	132.7	N.A.	147.0	109.8	77.8	72.0	111.3	106.1	135.0	312.1
Cape Charles - Exmore	129.9	N.A.	418.8	119.8	N.A.	83.7	N.A.	N.A.	127.6	192.8
Charlottesville	187.7	303.2	110.5	128.3	N.A.	113.5	106.2	115.5	238.4	322.6
Danville	137.3	N.A.	136.6	107.9	141.8	88.5	95.8	138.0	N.A.	252.0
Franklin	135.1	N.A.	145.8	111.7	130.0	95.1	N.A.	89.9	122.4	287.0
Fredericksburg	335.4	211.9	266.8	N.A.	182.1	182.5	N.A.	62.1	270.4	1110.2
Harrisonburg	174.3	298.2	345.4	N.A.	155.0	103.8	N.A.	124.7	175.5	310.0
Lynchburg	246.6	431.0	162.8	121.5	N.A.	94.1	97.5	111.5	193.7	967.2
Newport News - Hampton	133.5	N.A.	227.8	118.9	97.4	107.5	134.5]	114.7	165.0	N.A.
Norfolk - Va. Beach - Portsmouth	188.3	111.4	253.2	150.3	94.2	121.1		78.6	309.2	N.A.
Petersburg	158.0	263.5	248.1	N.A.	N.A.	73.5	126.8]	92.9	191.2	239.4
Richmond	167.8	492.9	401.1	150.3	136.6	128.6		93.7	179.5	336.1
Roanoke	167.4	392.2	54.1	105.7	179.5	79.7	120.5	99.4	191.8	346.7
Staunton	142.7	165.4	71.3	N.A.	96.3	95.6	N.A.	N.A.	138.4	248.8
Williamsburg	173.5	182.8	13.0	156.6	N.A.	140.7	N.A.	90.6	148.9	379.8
Winchester	172.8	N.A.	138.6	136.6	256.5	125.4	N.A.	N.A.	N.A.	N.A.

TABLE II April 1987

Percentage Change from same month last year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	March NON AGRI-CULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	March RETAIL SALES ‡
The State		23.0	-16.8	10.4	4.6	-1.9	3.9	-0.3	4.5	0.7
Alexandria	3.9	45.1	28.8	14.5	N.A.	2.6	4.8	0.6	-6.0	2.9
Bristol	-0.4	N.A.	9.6	5.3	-4.7	-26.1	3.4	38.7	-6.0	-2.5
Cape Charles - Exmore	7.3	N.A.	-7.2	3.8	N.A.	-13.4	N.A.	29.5	7.7	8.1
Charlottesville	-2.0	15.7	-22.9	9.1	N.A.	-22.3	4.1	-7.5	2.6	-6.9
Danville	8.4	N.A.	18.7	4.3	10.1	-9.6	1.0	49.5	N.A.	-5.1
Franklin	-3.6	N.A.	104.8	9.8	7.3	-29.3	N.A.	-4.2	0.1	-12.6
Fredericksburg	14.1	26.9	-15.6	N.A.	16.5	-9.8	N.A.	3.5	25.9	10.6
Harrisonburg	-1.4	7.9	-48.9	N.A.	5.8	-1.0	N.A.	-11.0	-3.1	5.7
Lynchburg	0.0	-4.0	-4.8	5.3	N.A.	-20.2	1.7	-6.1	4.6	5.8
Newport News - Hampton	3.7	N.A.	-61.4	17.0	7.3	11.2	2.0]	-15.0	2.2	4.6
Norfolk - Va. Beach - Portsmouth	5.3	2.9	-3.7	11.4	-2.9	4.2		4.9	8.5	2.6
Petersburg	4.6	-5.2	-54.9	N.A.	N.A.	2.3	4.1]	-3.7	12.3	-7.5
Richmond	7.2	27.6	117.8	7.4	12.4	-1.6		-7.5	7.8	26.9
Roanoke	-0.8	-12.2	7.6	4.8	0.7	-17.4	2.4	-5.9	6.1	-9.7
Staunton	13.8	16.8	-26.0	N.A.	4.1	-15.2	N.A.	N.A.	32.7	-4.2
Williamsburg	4.0	8.8	-96.0	6.5	N.A.	-1.2	N.A.	-1.5	12.7	-16.0
Winchester	-3.2	N.A.	29.8	4.0	4.0	-16.2	N.A.	N.A.	N.A.	-4.5

SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE III

Percentage Change January - April from same period last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	Jan.-Mar. NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES†	Jan.-Mar. RETAIL SALES‡
The State		15.7	-9.1	6.6	1.6	-8.3	4.0	0.6	2.2	11.0
Alexandria	4.0	37.7	403.0	11.2	N.A.	-2.7	5.0	0.3	2.2	11.8
Bristol	-1.5	N.A.	-35.2	-1.6	0.9	-19.8	3.5	19.8	-5.1	11.0
Cape Charles - Exmore	5.3	N.A.	-39.8	7.2	N.A.	-23.9	N.A.	27.3	2.6	18.4
Charlottesville	1.2	25.8	3.6	8.4	N.A.	-23.5	4.0	-1.0	2.4	14.7
Danville	-0.1	N.A.	-26.0	6.5	3.5	-26.4	1.5	12.0	N.A.	2.3
Franklin	4.4	N.A.	-13.1	9.6	5.7	-5.7	N.A.	1.0	-3.0	33.2
Fredericksburg	7.5	34.4	47.6	N.A.	9.6	-3.1	N.A.	5.5	7.1	19.3
Harrisonburg	1.9	2.3	44.8	N.A.	1.4	-16.2	N.A.	1.7	2.4	18.9
Lynchburg	-1.4	-4.3	46.7	4.3	N.A.	-19.9	1.6	-8.3	0.0	11.1
Newport News - Hampton	0.9	N.A.	-42.2	5.9	3.9	-3.0	2.3]	-5.0	-2.1	10.4
Norfolk - Portsmouth	3.0	67.1	-17.8	1.8	-0.5	-4.2		4.7	4.5	9.8
Petersburg	2.8	-20.4	-53.1	N.A.	N.A.	-11.0	3.9]	3.6	3.5	12.4
Richmond	2.0	14.9	105.1	7.5	4.2	-6.8		-2.9	-0.6	14.0
Roanoke	1.4	-13.5	45.5	1.4	-2.5	-22.7	2.7	-1.0	3.1	0.2
Staunton	6.8	5.3	63.4	N.A.	-0.4	-22.6	N.A.	N.A.	16.3	14.7
Williamsburg	4.4	11.9	-62.6	8.6	N.A.	-14.8	N.A.	5.2	9.1	4.7
Winchester	1.3	N.A.	46.7	3.9	N.A.	-22.5	N.A.	N.A.	N.A.	22.4

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
]Only total MSA data are available for these areas

N.A. — Not Available
O.O. — No Change

for the year to date has been above average in the Valley in spite of some erratic statistics for the month of April. The only clear weakness is a minor one, a well above average drop in new car sales throughout the region. We look for the Fredericksburg area and the Shenandoah Valley to remain growth leaders throughout 1987, contributing strongly to the rising overall growth in the non-MSA portions of Virginia. RLP

BUSINESS SUCCESS IS BEING POSITIVE

By
Joseph L. Boyd, Dean
School of Business
Norfolk State University

This article is condensed from Dr. Boyd's speech at our Beta Gamma Sigma honor society initiation. He gratiously consented for us to share his insights with our readers. RLP

We all know that positve and negative are words far apart in their meaning and implication. The territory between them is the jousting arena where the success or failure of every business enterprise is determined and the happiness or misery of lives decided.

Victory tends to favor the contestants who tilt under the positive banner. They are people who have trained themselves to think "What action am I going to take?" instead of "What is going to happen to me?"

Being positive is an element in initiative, which is the ability to think of and do new things. Some persons stumble over opportunities as if they were obstacles, but positive people seek the plus values.

An example of substituting a positive thought for a negative is provided by the discovery of penicillin. Many bacteriologists had seen that cultures of microbes were spoiled when exposed to molds, but all they concluded was that molds must be kept out of such cultures. It took a stroke of genius to see the medicinal promise of the basic observation.

This example shows also that it does not take much to turn things in your favor. Noticing trifles, observing their nature, and connecting thoughts about them with knowledge already stored in your mind produces new ideas. Shakespeare heard talk about a small coral island, and on this hearsay erected his magnificent fantasy of THE TEMPEST.

All of the progress of civilization is due to the constructive thinking of people. The record of history is brilliant with the deeds of men and women who said "I can", while it is silent for the most part concerning those who said "I can't". Positive people believe that it is better to fail in carrying out a project than to not fail because they have not tried. Usually, one finds the power to accomplish any task of which one's reason approves.

Enthusiasm is a necessary ingredient in doing a job successfully. Great works are often performed not by strength but by perseverance. Ideally, the artist, the scientist, the business executive, the inventor and the writer are moved by such an irresistible impulse to create something that, far from striking for higher income and shorter hours, they are willing even to pay for the chance to bring forth something new.

The desire for something is more than simple willingness to receive. It is positive, purposeful, energetic and creative. It is powered by our initiative and energy and perseverance, and all these are positive forces. You keep your eye on where you want to go.

Wise people make their own future. They give themselves heart and soul to something beyond the satisfaction of today's wants. They do not give credence to fate and destiny and waves of the future. Those are abstract things. Instead, they consider the ways in which to determine their own future right now. A belief in predestination may be a cowardly escape from the responsibility of making a positive decision and doing a positive action.

A design is needed. Without a plan, all our little bricks of reconstruction might just as well remain in the brick yard. Chains of consequences do not always follow the pattern we lay out, but it is just as well to start them in the right direction.

A creative person does not follow rules slavishly, although he needs to know them. Shakespeare departed from the rules of drama and Tintoretto from the rules of art with some success. One must sometimes take a leap without seeing what is on the other side of the wall. That means saying: "To the best of my lights at this moment this is what I choose to do, even though I may know more and choose differently tomorrow."

There are options open. When one comes to a fork in the road and must decide what to do he has several choices: he may sit down, he may step out on this or that of the diverging paths, or he may turn his back on the problem and go home.

No one can become dominant in his field unless he does independent thinking, comes to his own decisions, checks them for their accuracy, and acts upon them. People who hesitate between being positive or negative are in an unfortunate position. By remaining in the middle of the road they incur the danger of being run over by both lanes of traffic instead of by only one.

Most people who are placed in positions where they must think judicially seek to find a specific rule instead of trying specific cases by general rules. It is an affront to use generalities when particulars are available, but a person will deal more constructively with individual cases when he is acquainted with general rules.

The first distinguishing characteristic of straight thinking is facing the facts. When you are explicit, and differentiate between what you know and what you do not know but merely take for granted, you avoid the vagueness in which many people live.

An ideal is the highest product of the imagination. It may be out of reach: it is, nevertheless, a necessary point at which to aim.

Anyone's sense of what is good and valuable and desirable must take account of one's environment and his or her individual brand of human nature. A sense of value is a positive motive power. It is true that it imposes on life many labors, but without it we should sink back into the negativism of lower types which are given the right to live and desire nothing else.

To talk of "rights" is to talk negatively, for rights can only organize resistance. Duty is positive. Among the positive actions to which we are obliged to pay attention are: to maintain ourselves and our families in health and comfort; to pay our debts, to increase our prosperity by increasing efficiency.

The person who practices this positive-oriented way of living is not accommodating himself to the ills of society, trying to make the best of them, but is constructing his life on a sense of values that places the trivia of daily life in manageable perspective.

Business Success is being positive. It means that one has to be enthusiastic, one has to know what his objectives are, one has to be prudent, one has to be able to make a decision and one has to be idealistic.

Being positive means shifting thoughts from things that are against you and focusing them on the vast power that is for you. And having made up your mind to do something positive, spare no pains, do it thoroughly and well. It is the use we make of our capacities that determines the success of our efforts.

Give life your positive ideas. Every person is, regarding his own life, like the leader of an orchestra: inspiring, guiding, restraining, coordinating, interpreting the manifold qualities of his being. He has stature. He believes in himself. JLB

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Roy L. Pearson, Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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BUREAU OF BUSINESS RESEARCH
SCHOOL OF BUSINESS ADMINISTRATION
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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 322 **June, 1987**

Business in Virginia May, 1987 Data

The economic indicators for which we have May data plus the April payroll employment figures show the Commonwealth steadily following the expected course. That course, as our regular readers are aware, has some negative aspects, falling building permits and new car registrations.

Building permits(dollar value of residential and commercial permits) in May declined 38.0 percent, adding further confirmation that the predicted downturn in construction activity soon will become apparent in the majority of Virginia's urban areas and in construction-related businesses. The substantial May decrease is not an aberration. Permits now are down 13.6 percent for the year to date, and the June results are very likely to be another large decline compared to 1986. The drop in planned construction actually has some wecome features. First, it is an adjustment to a more sustainable level, more in balance with demand. Secondly, the adjustment is occurring while Virginia's overall growth is quite strong and we can absorb the dampening effect without our growth coming to a halt.

There always are crosscurrents in the flow of economic activity, with some sectors or regions moving down while others are advancing. A downturn in a leading indicator such as building permits does not signal an imminent recession unless other major sectors also are showing too much weakness to offset the downturn. When an economy is displaying as much overall strength as the Virginia economy, the downturn in such leading indicators merely points to some future deceleration in the rate of growth in jobs and income, a deceleration we already are experiencing and expected. There are no signs that Virginia is approaching a recession in 1987 or 1988. The Commonwealth's growth simply is following a course of mild deceleration from exceptionally high rates to ones that are merely average for us but above-average compared to the nation.

The continuing decline in new car registrations, 4.9 percent in May and 7.5 percent for the year to date, should be interpreted in the same context. Virginians are buying fewer cars after the extaordinary surge last year. But the decrease is not exceptional and not a signal that consumers are cutting back across the board. Our sample of retail stores across the state reported a 5.8 percent gain in May compared to May of 1986, better than the national rise of 5.1 percent in a comparable measure, retail trade excluding the automobile group.

The April nonagricultural employment growth statewide was 3.5 percent, lowering the cumulative 1987 growth to 3.9 percent. That is a continuation of the steady deceleration expected this year, in line with our prediction of a 3.0 percent gain for 1987.

The Commonwealth's performance to date in 1987 shows a mature expansion which is slowing a step or two but still has the strength and endurance to stay ahead of the pace in most other states. RLP

Chart I

Nine Selected Business & Economic Indicators Percentage Change

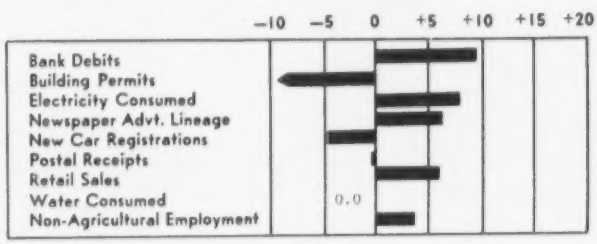
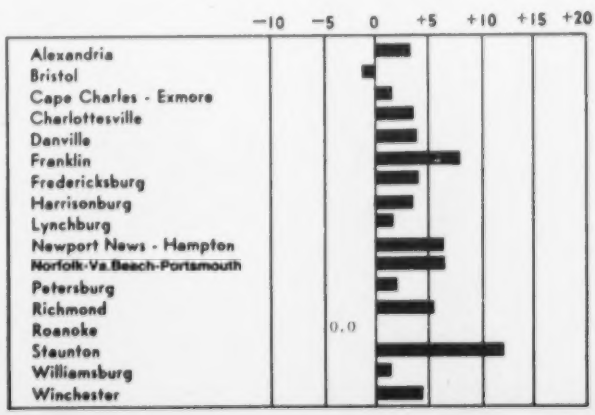


Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I May, 1987

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	April NON AGRI-CULTURAL EMPLOYMENT	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		389.7	187.4	128.5	119.5	184.5	137.1	95.4	186.2	355.1
Alexandria	162.9	418.0	319.0	138.0	N.A.	150.8	180.5	102.2	189.5	N.A.
Bristol	142.5	N.A.	129.8	99.5	83.1	123.3	112.8	96.4	147.1	325.7
Cape Charles - Exmore	126.0	N.A.	251.7	117.7	N.A.	95.9	N.A.	N.A.	122.0	176.6
Charlottesville	187.9	295.3	300.4	117.9	N.A.	150.0	108.5	123.4	234.6	299.4
Danville	130.8	N.A.	70.9	111.5	139.3	99.0	96.0	87.3	N.A.	231.4
Franklin	144.0	N.A.	335.2	105.2	122.5	121.3	N.A.	107.8	131.4	300.6
Fredericksburg	314.1	202.1	2038.7	N.A.	194.8	190.0	N.A.	67.5	237.9	1002.6
Harrisonburg	184.9	240.4	486.7	N.A.	147.2	116.7	N.A.	147.8	191.7	307.7
Lynchburg	224.4	344.1	187.8	112.3	N.A.	129.4	98.6	111.5	186.4	784.3
Newport News - Hampton	160.3	N.A.	298.5	114.2	107.1	108.1	136.3]	130.8	228.7	N.A.
Norfolk - Va. Beach - Portsmouth	189.2	401.7	213.8	141.4	102.4	143.2		88.7	300.5	N.A.
Petersburg	145.0	379.4	356.8	N.A.	N.A.	71.2	127.3]	102.3	160.7	232.4
Richmond	162.4	447.8	395.7	141.5	141.3	151.2		108.9	153.6	330.8
Roanoke	156.8	329.7	56.2	92.1	183.2	106.4	121.4	107.2	167.2	299.1
Staunton	149.2	147.6	43.5	N.A.	94.7	101.7	N.A.	N.A.	136.6	289.2
Williamsburg	174.2	180.0	10.3	153.8	N.A.	133.9	N.A.	90.7	155.1	375.5
Winchester	166.0	374.7	152.1	126.4	233.2	138.5	N.A.	N.A.	N.A.	N.A.

TABLE II May, 1987

Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	April NON AGRI-CULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	April RETAIL SALES ‡
The State		9.2	-38.0	7.5	6.2	-4.9	3.5	0.0	5.8	9.8
Alexandria	3.2	44.4	76.0	13.5	N.A.	-9.1	4.1	2.3	-0.7	16.5
Bristol	-1.4	N.A.	121.3	6.3	-2.8	-8.3	3.0	9.3	-7.0	0.6
Cape Charles - Exmore	1.2	N.A.	-29.5	8.4	N.A.	-19.2	N.A.	11.8	-3.1	16.4
Charlottesville	3.5	20.9	138.8	2.3	N.A.	22.9	4.2	-6.3	-4.4	18.4
Danville	3.8	N.A.	-49.2	3.3	12.9	1.2	0.0	-0.8	N.A.	6.1
Franklin	7.8	N.A.	-30.3	3.6	-2.0	-27.5	N.A.	32.7	-1.1	59.0
Fredericksburg	3.7	27.7	2613.9	N.A.	9.5	-14.2	N.A.	-2.4	2.0	28.9
Harrisonburg	3.4	-17.3	-3.1	N.A.	0.4	-8.8	N.A.	1.2	2.4	23.6
Lynchburg	1.3	-27.1	-14.6	5.0	N.A.	10.0	2.2	-12.3	1.5	3.1
Newport News - Hampton	6.2	N.A.	-42.1	-3.9	16.8	1.1	2.5]	-3.1	13.6	1.3
Norfolk - Va. Beach - Portsmouth	6.3	11.1	-28.6	11.3	3.0	9.0		-1.4	12.3	-4.5
Petersburg	2.1	8.7	40.0	N.A.	N.A.	-11.6	3.2]	4.8	5.5	1.8
Richmond	5.1	14.3	-37.7	6.1	11.3	3.7		-4.2	6.6	6.4
Roanoke	0.0	-23.5	0.9	-2.6	-2.5	-14.3	2.3	-5.0	7.3	-0.1
Staunton	12.3	18.1	-27.6	N.A.	6.8	-16.3	N.A.	N.A.	24.2	10.9
Williamsburg	1.4	10.6	-96.8	8.1	N.A.	-22.9	N.A.	-13.2	7.7	15.0
Winchester	4.4	9.8	-62.9	6.8	7.0	-15.8	N.A.	N.A.	N.A.	19.7

TABLE III

Percentage Change January - May from same period last year

CITY	CITY INDEX *	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	Jan.-Apr. NON AGRI-CULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	Jan.-Apr. RETAIL SALES ‡
The State		15.0	-13.6	6.7	2.4	-7.5	3.9	-0.1	2.9	10.8
Alexandria	3.8	45.0	295.2	11.6	N.A.	-4.3	4.8	0.7	1.7	12.8
Bristol	-0.4	N.A.	-14.0	-0.4	0.2	-16.7	3.4	17.7	-5.5	8.9
Cape Charles - Exmore	4.4	N.A.	-37.7	7.4	N.A.	-22.7	N.A.	23.9	1.5	18.0
Charlottesville	1.6	24.8	20.0	7.3	N.A.	-14.8	4.1	-2.2	0.9	15.4
Danville	0.8	N.A.	-29.9	5.8	5.6	-20.3	1.1	9.4	N.A.	3.0
Franklin	4.8	N.A.	-22.0	8.6	4.0	-11.5	N.A.	6.6	-2.6	38.2
Fredericksburg	6.1	32.9	300.3	N.A.	9.1	-9.4	N.A.	3.7	5.9	21.1
Harrisonburg	2.8	-2.1	34.1	N.A.	1.8	-14.5	N.A.	1.6	2.4	19.8
Lynchburg	-1.1	-3.9	27.8	4.4	N.A.	-13.5	1.7	-9.1	0.3	9.5
Newport News - Hampton	3.5	N.A.	-42.2	4.0	6.6	-2.1	2.4]	-4.6	0.8	8.6
Norfolk - Va. Beach - Portsmouth	3.8	45.2	-20.3	3.3	0.6	-1.3		3.4	6.2	6.8
Petersburg	2.6	-12.3	-38.9	N.A.	N.A.	-11.1	3.7]	3.8	3.8	10.3
Richmond	2.6	14.7	16.1	7.2	5.8	-4.3		-3.2	0.7	12.4
Roanoke	-1.3	-15.9	32.5	0.7	-3.9	-20.6	2.6	-1.9	3.9	0.1
Staunton	8.0	7.8	64.8	N.A.	1.1	-21.1	N.A.	N.A.	18.0	14.0
Williamsburg	3.7	11.6	-72.0	8.5	N.A.	-16.7	N.A.	0.7	8.8	6.8
Winchester	1.5	7.4	-16.7	4.4	N.A.	-21.0	N.A.	N.A.	N.A.	21.0

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
] Only total MSA data are available for these areas

N.A. — Not Available
0.0 — No Change

After SIN- The Summit of Industrialized Nations

The Venice economic summit in June yielded no specific initiatives for balancing world trade flows or the relative values of currencies. The participants merely reaffirmed the desirability of already existing initiatives, of continuing discussions, and of the monitoring of world economic developments. The final communique, however, did not pledge any specific action if economic trends diverge from the desired path.

The annual summit has lost much of its earlier status primarily because the nations have followed through on prior pledges to increase their consultations with each other on economic issues which have international repercussions. Meetings of high-level officials now occur throughout the year, and cooperative policy actions may be announced at any time, such as Japan's $41 billion emergency economic stimulus package announced in May. Therefore the lack of specific policy decisions at this June's summit does not imply no action will be taken by the participants to adjust world trade imbalances.

In my opinion, the risk that the United States will adopt an overdose of the wrong trade-related policies is far greater than the risk that other countries will do nothing. The political climate here seems to be one of impatience, of a perceived need for us to unilaterally seek a 'quick fix' for the trade deficit problem. That could sacrifice our economic health as well as the health of many other nations around the world. There are actions we need to take, but they will not wipe out the trade deficit quickly.

The United States is the dominant force in world trade. Last year our imports of goods and services were $498 billion. For perspective, that is over 5 times as large as the total output of the Commonwealth of Virginia. Total imports by all countries other than the Soviet block were roughly $2.1 trillion, valued in dollars. Our imports accounted for almost one-quarter of the free world's international trade.

Our exports of goods and services were of course much less. But, they still were $373 billion, about 18 percent of total world trade.

Our international deficit on goods and services in 1986 was $125 billion, by itself 6 percent of world trade. Elimination of that deficit in a one-year period would cause a significant decrease in output for the rest of the world, no matter what method we use. A $125 billion reduction in imports means a direct loss of that much foreign production. Alternatively, a $125 billion increase in our exports means foreign producers would have to experience an equivalent drop in their domestic demand. Any 'quick fix' policies we might adopt to eliminate the deficit would significantly reduce economic growth in other countries, in some cases pushing them into recession.

Any 'quick fix' policies also would do severe damage to U. S. economic health. The only quick way for the United States to wipe out the trade deficit is to reduce imports: by raising their prices through tariffs, by cutting their volume through quotas, or by reducing the quantity you and I want to purchase by lowering our incomes. Any of these three methods would require massive action if the target were a 25 percent decrease within one year in our payments to other countries for the goods we import. If we choose tariffs, they would have to be about 25 percent of the price, therefore the immediate effect for our consumers would be higher prices for imported goods and services, creating a general inflationary surge of over 2 percent in U.S. price levels. We would be back in the inflationary spiral we suffered four years of low growth and recession to break. If we choose quotas, they would have to restrict import volume by more than 25 percent, since experience has shown foreign producers would raise their prices to some extent. If either massive tariffs or severe quotas reduced import volume by 25 percent that would mean a sudden surge in demand for U.S. substitutes. Whatever the long-run benefits, the short-run impact would have some substantial costs. For many products American industry would not be able to adjust quickly to producing the volume of U.S. substitutes suddenly demanded. Prices for these products would also rise.

Neither tariffs nor quotas can be viewed as effective 'quick fixes', even from just the U.S. point of view. The inflationary pressures created are too high a cost. There is an additional very likely cost. If we did succeed in sharply curtailing imports by either method, other countries would experience strong political and economic pressures to retaliate with their own restrictions on our imports to them. Then a U.S. trade deficit reappears along with falling U.S. output.

The third alternative for reducing imports is the indirect approach. Slow our growth so that imports fall naturally by enough to move us into balance. Given the size of the import reduction needed, we would have to cut real GNP growth by at least 5 percent. But as you know, our real GNP is only expected to grow about 2.5 percent this year. Subtract 5 from a 2.5 percent growth rate and you can see where that leaves us: recession.

None of those three alternatives directly involved our exports. Large export gains cannot be generated unilaterally by U.S. policy. We cannot force other countries to buy from us, and most of their governments could not force their people to do so even if they wanted to. In order to sell more, we need cooperation.

In some cases that means getting more access to foreign markets. We do need to continue to push hard for fair trade, equal access, not just in manufactured goods but also agriculture and services. We are very good at producing services, for example financial services and telecommunications. But most services are generally not even a part of the GATT agreements: the General Agreements on Tariffs and Trade. In addition many important services are protected if not

owned by other governments, complicating the issue of fair competition. Both the United States and world trade in general will benefit from negotiations that acknowledge and set fair trade standards for the international flow of services.

Better access to markets of all types will help, but it cannot do the job alone or quickly. Our international deficit on goods and services went from $200 million in 1982 to $126 billion in 1986. That did not happen because all the other countries suddenly changed how they play the game and became astronomically more unfair. And we will not eliminate much of that deficit in the next year or so if they suddenly change to our view of "fair trade".

More access is not enough. Those countries have to have more ability to buy. They have to be producing more output, and generating more income in the process, so they can buy more of what we produce. And their output growth has to be generated inside their countries, not by selling more goods to the United States.

In short, we need for other countries to stimulate their own economies to create their own higher growth. That will enable us to increase our exports, adding to world trade rather than subtracting from it. A major part of our strategy has been to urge the other major industrialized countries to stimulate their economies, primarily through more stimulative fiscal policies as Japan is doing.

Higher real output growth outside of the U.S. is a key element. However, it will not be a quick fix. World output growth cannot and will not double overnight. Even a very remarkable one percent increase in worldwide real growth in 1988 would not by itself eliminate our trade imbalance.

In the best of all possible worlds, with only very mild additional declines in the dollar, improved access to foreign markets, and more stimulative domestic policies in the other key industrialized nations, our deficit balance on goods and services will take several years to eliminate in a manner that does not create significantly higher inflation or a recession in the United States. We need the patience to accept that, and not demand the quick fix from our own government.

RLP

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Roy L. Pearson Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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SCHOOL OF BUSINESS ADMINISTRATION
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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 323 July, 1987

Business in Virginia June 1987 Data

Building permits across Virginia fell in June to 35.0 percent below the June 1986 level. That large drop was expected (see the May issue) and continues the substantial monthly declines experienced since March. The cumulative result for the first half of 1987 is building permits 18.8 percent below the same period last year. Not all areas in Virginia are at the same position in the building cycle, so the statistics vary widely among the cities. The overall pattern, however, clearly is an ongoing slowdown in the planned level of construction.

New car registrations also continued to decline in June, down 6.5 percent. This brought the cumulative first half decrease to 7.3 percent, with 16 of our 17 areas experiencing lower sales: only South Hampton Roads (Norfolk-Portsmouth-Virginia Beach area) achieved a first-half gain, and that was a negligible 0.6 percent.

On the positive side, our sample of retail stores reported a 7.5 percent increase in June sales, up from last month's 5.8 percent gain. Since our sample consists mainly of general merchandise stores, these results show a rising level of demand for nondurable goods. A more comprehensive measure of retail sales is the sales subject to Virginia's general sales tax (last column of Tables II and III) as reported by the Department of Taxation, but their data are available only through May. Taxable sales statewide fell 0.6 percent in May, in contrast to the 5.8 percent gain that month by our sample of retail stores. Why such a difference? Taxable sales surged last year in May relative to our sample because of differences in the businesses covered, and those differences now are creating a reverse movement. The taxable sales data include some types of businesses not in our sample such as building supply firms and other construction-related businesses, and tourist-related establishments - hotels, motels, and restaurants. May of 1986 was a booming month for construction-related businesses as well as tourist activity, creating an extraordinary year-over-year jump of 20.4 percent in that month. Therefore a slight decrease of less than one percent still leaves Virginia's May 1987 taxable sales at an extraordinarily high level.

On the other hand, the cumulative January-May gain of 8.5 percent in taxable sales (last column, Table III) overstates the strength in Virginia's retail trade since it includes as 1987 sales some Christmas 1986 activity which was reported late due to the January snowstorms. A 3 percent figure would be closer to the actual 1987 experience. That is exactly the figure we get if we compare only March-May 1987 to the same period in 1986. Nationally, total retail sales excluding the automobile group were up 5.1 percent for March-May 1987 versus March-May 1986, two percentage points above Virginia's taxable sales growth. The retail trade picture in Virginia therefore is mixed: apparent strong demand growth in sales of nondurable goods to residents but with weakness developing in construction-related goods and rather modest overall sales growth. Second half growth in retail trade (taxable sales basis) will be considerably above the 3.0 percent recorded for March-May, but do not plan on gains approaching double digits. The state and national income growth rates and general condition of household finances point to an upper limit of about 7 percent for Virginia taxable sales growth. RLP

Chart I **Nine Selected Business & Economic Indicators Percentage Change**

Percentage Change June, 1987 from June, 1986

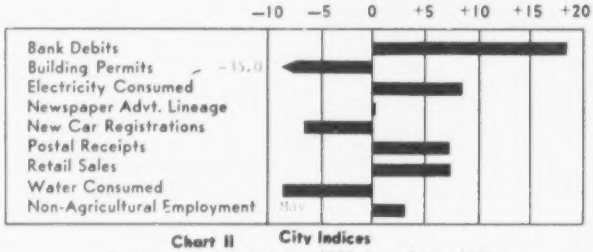
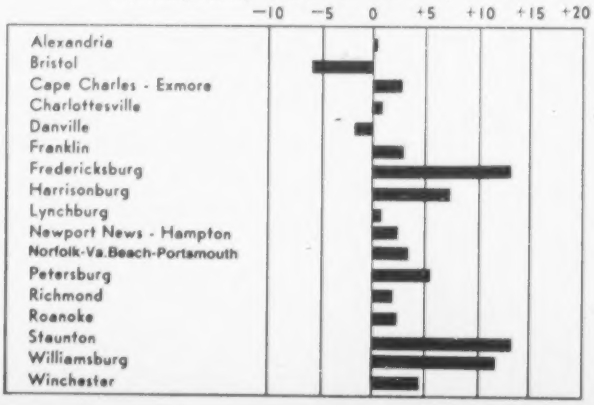


Chart II **City Indices**

Percentage Change June, 1987 from June, 1986



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I June 1987

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1972 = Base Period = 100)

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	May NON AGRICULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		456.9	292.7	152.0	100.8	178.4	138.0	99.8	164.0	337.0
Alexandria	153.7	914.1	194.7	172.3	N.A.	146.1	183.6	105.4	158.9	N.A.
Bristol	135.6	N.A.	61.0	91.5	69.8	88.4	113.5	109.6	132.1	351.3
Cape Charles - Exmore	154.8	N.A.	440.0	133.3	N.A.	87.8	N.A.	N.A.	130.4	316.7
Charlottesville	180.0	290.5	422.8	138.3	N.A.	142.8	109.3	128.4	207.6	297.7
Danville	128.1	N.A.	183.8	138.4	119.5	97.2	97.0	90.8	N.A.	235.4
Franklin	141.2	N.A.	453.3	133.2	122.4	136.1	N.A.	113.3	122.9	255.8
Fredericksburg	207.2	292.3	432.1	N.A.	194.8	199.6	N.A.	75.6	257.8	N.A.
Harrisonburg	169.5	269.3	1519.6	N.A.	137.1	122.6	N.A.	143.7	168.5	275.4
Lynchburg	231.6	387.9	307.8	125.7	N.A.	93.4	98.8	110.6	190.4	853.3
Newport News - Hampton	271.4	N.A.	126.2	129.6	1135.4	111.8	138.2]	136.0	171.4	N.A.
Norfolk - Va. Beach - Portsmouth	159.3	549.2	335.7	164.1	93.0	140.7		93.4	215.0	N.A.
Petersburg	141.7	173.1	297.4	N.A.	N.A.	100.5	127.7]	116.8	127.7	264.1
Richmond	162.9	508.3	101.9	168.9	120.6	147.4		111.8	161.1	306.4
Roanoke	143.3	371.9	131.0	105.6	160.3	95.7	123.5	119.4	122.5	317.9
Staunton	166.8	166.8	156.6	N.A.	71.4	96.6	N.A.	N.A.	195.8	245.1
Williamsburg	175.9	341.7	183.0	N.A.	N.A.	176.3	N.A.	105.2	155.1	301.2
Winchester	170.0	392.9	1745.7	133.8	218.2	158.0	N.A.	N.A.	N.A.	N.A.

TABLE II June, 1987

Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	May NON AGRICULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	May RETAIL SALES ‡
The State		18.2	-35.0	8.6	0.1	-6.5	2.9	-8.7	7.5	-0.6
Alexandria	0.2	64.9	-50.7	11.1	N.A.	-16.7	3.7	11.2	5.8	-4.7
Bristol	-5.7	N.A.	-23.7	-6.1	-9.3	-17.1	4.0	10.8	-6.4	-14.1
Cape Charles - Exmore	2.6	N.A.	84.4	7.7	N.A.	-23.9	N.A.	-26.7	20.2	0.8
Charlottesville	0.8	12.2	32.1	11.4	N.A.	-3.1	2.4	-6.2	1.0	-8.6
Danville	-1.8	N.A.	-28.5	7.1	-1.9	-1.1	0.8	1.1	N.A.	-16.8
Franklin	2.5	N.A.	-58.6	3.1	8.3	-41.1	N.A.	-18.7	-2.5	75.6
Fredericksburg	12.7	72.7	75.4	N.A.	132.3	-2.7	N.A.	-3.1	19.2	5.6
Harrisonburg	7.0	-11.9	143.2	N.A.	5.2	1.1	N.A.	11.3	7.8	8.0
Lynchburg	0.6	-19.4	48.6	6.9	N.A.	-7.2	2.0	-7.7	5.1	-5.2
Newport News - Hampton	2.2	N.A.	-41.3	5.6	8.6	-8.8	2.4]	-13.5	8.1	2.8
Norfolk - Va. Beach - Portsmouth	1.2	30.1	-34.4	7.2	1.5	6.6		-7.6	7.3	-2.8
Petersburg	5.3	-36.7	31.7	N.A.	N.A.	0.9	2.5]	1.1	11.9	-2.8
Richmond	1.7	20.1	-22.9	6.6	-0.8	1.6		-12.7	4.9	3.7
Roanoke	2.1	-15.1	-11.4	0.3	-0.9	-6.3	2.6	-1.8	10.3	-6.1
Staunton	11.3	17.2	478.3	N.A.	-16.4	-21.8	N.A.	N.A.	41.7	-7.2
Williamsburg	11.4	98.1	-68.1	5.2	N.A.	-11.0	N.A.	-11.6	12.2	62.5
Winchester	4.3	5.5	1049.3	6.9	5.5	4.1	N.A.	N.A.	N.A.	0.3

TABLE III

Percentage Change January - June from same period last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	Jan.-May NON AGRICULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	Jan.-May RETAIL SALES ‡
The State		15.6	-18.8	7.0	2.3	-7.3	3.7	-1.8	3.8	8.5
Alexandria	3.1	68.4	130.6	11.8	N.A.	-6.8	4.5	-1.8	2.5	9.3
Bristol	-1.4	N.A.	-15.6	-1.2	-1.4	-16.8	3.3	16.4	-5.7	4.4
Cape Charles - Exmore	4.1	N.A.	-23.3	7.4	N.A.	-22.9	N.A.	14.2	5.5	13.8
Charlottesville	1.3	22.5	22.9	8.1	N.A.	-12.6	3.7	-2.9	1.3	10.2
Danville	0.2	N.A.	-29.5	6.0	4.2	-16.9	1.0	7.9	N.A.	-1.1
Franklin	4.2	N.A.	-41.8	7.6	4.7	-19.4	N.A.	0.7	-2.6	47.4
Fredericksburg	7.6	60.4	245.4	N.A.	12.9	-5.2	N.A.	2.2	8.4	17.8
Harrisonburg	4.0	-4.0	57.8	N.A.	1.9	-11.6	N.A.	4.2	3.3	17.5
Lynchburg	-0.2	-10.9	32.5	4.8	N.A.	-12.5	1.8	-8.9	1.2	9.9
Newport News - Hampton	1.9	N.A.	-42.0	5.1	7.0	-3.4	2.4]	-6.5	2.1	7.4
Norfolk - Va. Beach - Portsmouth	1.7	40.5	-32.4	4.0	0.7	0.6		1.1	6.4	4.9
Petersburg	1.2	-16.7	-29.3	N.A.	N.A.	-8.5	3.5]	3.3	5.4	7.7
Richmond	2.5	15.7	31.7	5.6	4.6	-3.2		-5.1	1.5	10.7
Roanoke	-0.7	-15.8	16.1	0.7	-1.4	-18.1	2.6	-1.9	5.0	-1.1
Staunton	8.0	9.5	125.4	N.A.	-1.9	-21.2	N.A.	N.A.	20.6	9.5
Williamsburg	4.9	28.0	-65.9	7.9	N.A.	-15.9	N.A.	-2.0	9.4	16.3
Winchester	1.8	7.0	443.2	5.8	N.A.	-16.6	N.A.	N.A.	N.A.	17.3

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.

#Virginia Employment Commission data which lags behind current reports.

†Preliminary data based on a survey sample.

‡Revised data based on sales tax information which lags behind current reports.

→Only total MSA data are available for these areas

N.A. — Not Available
0.0 — No Change

Virginia Income, First Quarter 1987

The U.S. Department of Commerce released on July 20 their state personal income estimates for the first quarter of 1987. That release is the first official report on state earnings and income developments in the year 1987, so a review is worthwhile to see how we fared.

For comparisons we chose to evaluate the growth rate since the comparable period a year ago. Therefore Table IV contains two sets of growth rates for Virginia: the growth rates by category for the period from the first quarter of 1985 (1985:1) through the first quarter of 1986 (1986:1), and the more recent growth rates for the period 1986:1 through 1987:1. These first quarter to first quarter comparisons involve a time of year when activity is low in some Virginia industries, especially agriculture, construction, and tourism, so the comparisons are not necessarily reliable indicators of the likely full year performance of specific industries. The comparisons do, however, give some insights into the general strength and growth of Virginia income. That said, let us turn to the data.

The total personal income of Virginians reached a $92.7 billion annual rate during the first quarter of 1987, a 6.4 percent increase from the revised 1986:1 level. That increase was almost two percentage points better than the national gain of 4.6 percent. Therefore Virginia's income growth quite clearly remains well above average.

Another performance measure is earnings by place of work, showing Virginia's role as a business center. The 1986:1-1987:1 growth rate for Virginia was 8.5 percent, substantially better than the state's resident income growth and displaying an even greater spread relative to the national increase which was only 5.8 percent. Therefore by place of work as well as by place of residence, Virginia's income growth clearly is superior to the national performance.

The Virginia growth rates, however, for total resident income and for total earnings by place of work were lower from 1986:1 through 1987:1 than they were on a first quarter to first quarter basis in the preceding year, 1985:1-1986:1. For personal income, the decline was from a 7.5 percent rate to 6.4 percent, more than a one percentage point slowdown. For earnings by place of work, the deceleration was more modest, from 9.1 percent to 8.5 percent. That more modest deceleration was the result of a large improvement in farm earnings, which are very erratic from quarter to quarter not only because of natural forces but also swings in payments under Federal programs. If instead we use total nonfarm earnings, the 1986:1-1987:1 growth rate of 8.4 percent is 1.1 percentage points below the 9.5 percent rate in the previous year, about the same degree of deceleration that we experienced in the growth of total resident income.

The nonfarm earnings growth rates by industry for the two periods are shown in columns 2 and 3 of Table IV. Column 4 gives the differences in growth rates, obtained by subtracting column 2 from column 3. Therefore a minus sign in column 4 indicates a decline in the growth rate.

Scanning the data shows no private industry sector in Virginia achieved any significant acceleration in earnings growth in the first quarter of 1987. Mining experienced a swing of 4.8 percent points, but that was related to a slower rate of decline, going from an 8.1 percent drop to a 3.2 percent decrease. Only two private sector industries achieved higher earnings growth from 1986:1-1987:1 than from 1985:1-1986:1: construction and the FIRE (finance, insurance and real estate) sector. The acceleration for construction was only 0.4 percent, and that gain is almost certain to disappear when the full year's data are available. The FIRE sector data are more indicative of continuing strength. With first quarter 1986 to first quarter 1987 growth of 17.1 percent, this sector stands out as a growth leader. This strength will be weakened somewhat, but not reversed, by the current slowdown in real estate activity.

In private services, the most recent four-quarter growth rate for earnings was 11.6 percent. Still quite strong, with only a modest deceleration (0.4 percentage points) from the preceding four quarters. On the other hand, retail trade earnings growth fell from 11.8 percent to 6.8 percent, a deceleration of 5 percentage points. This deceleration partly was due to the snowstorms in January and the late Easter this year, so the full year results are likely to show a more modest deceleration. But, still a deceleration. Total income and retail sales growth rates have been slowing and no longer will support double-digit growth in retail trade earnings.

One public sector in Virginia did reveal accelerating growth. The recent increase for military earnings was 6.4 percent, up from 5.0 percent in the preceding year. This sector also is expected to experience decelerating growth in the future.

In sum, total earnings are growing at a very substantial pace statewide, but the growth rate clearly has decelerated. A sector by sector review of the first quarter 1987 income figures for Virginia reveals no significant and sustainable year-over-year acceleration in earnings growth in any major industry sector, private or public. Therefore the data reveal no likely scenerio for moving Virginia's overall growth rate back to a higher level. Manufacturing employment is predicted to grow in the second half of 1987, a possible source of new strength. That, however, cannot be strong enough to offset the very broadly based deceleration in earnings growth being experienced in the Virginia economy. RLP

TABLE IV First Quarter 1987 Virginia Personal Income by Major Source and Earnings by Industry, Millions of Dollars, and First Quarter to First Quarter Percent Change

	$Millions	Percent Change 1985:1-1986:1	Percent Change 1986:1-1987:1	Difference (Column 3 Minus Column 2)
	(1)	(2)	(3)	(4)
Total Personal Income by Place of Residence	$92,749	7.5%	6.4%	-1.1%
Total Earnings by Place of Work	67,299	9.1	8.5	-0.6
Earnings by Industry				
Farm	117	-80.9	143.8	224.6
Nonfarm	67,183	9.5	8.4	-1.1
Private	50,137	10.2	9.0	-1.2
Ag. Services, Forestry and Fisheries	257	15.4	14.2	-1.2
Mining	783	-8.1	-3.2	4.9
Construction	5,319	17.0	17.4	0.4
Manufacturing	10,794	5.8	3.3	-2.5
Nondurable Goods	5,400	6.3	4.0	-2.3
Durable Goods	5,394	5.4	2.6	-2.8
Transportation	4,337	8.6	6.4	-2.2
Wholesale Trade	3,551	8.3	8.0	-0.2
Retail Trade	6,390	11.8	6.8	-5.0
Finance, Insurance, and Real Estate	3,639	16.5	17.1	0.6
Services	14,567	12.0	11.6	-0.4
Government	17,046	7.4	6.6	-0.8
Federal, Civilian	5,447	3.3	3.2	-0.2
Military	4,563	5.0	6.4	1.5
State and Local	7,036	12.8	9.6	-3.2

Source: Regional Economic Information System
Bureau of Economic Analysis, July 1987.

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Roy L. Pearson Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 324 **August, 1987**

Business in Virginia July, 1987 Data

Last month we advised not to expect second-half retail sales growth to approach the double-digit range, that a more realistic expectation would be a growth rate no higher than 7 percent. Since then the Virginia Department of Taxation data showed there was a 13.0 percent rise in the June 1987 taxable sales compared to June 1986. That June surge in sales was a surprise but does not change our outlook for the coming months. Personal income in Virginia currently is growing at about 6.5 pecent. Virginians cannot and will not increase their retail purchases at twice that rate for very long. Look for them to revert to expenditure increases more in line with their income growth.

The July reports from our own sample of retail stores indicate slower growth than in June. The July statewide gain for our sample was 5.1 percent, down substantially from the 7.5 percent experienced in June. Taxable sales most likely has followed a similar course of more modest July growth.

Overall, however, the most recent Virginia data available are very good news. For the first time in 1987, all nine of the statewide percentage changes from the same month last year reported in Table II are positive. In particular, new car registrations managed a 0.2 percent rise in July after falling for five of the preceding six months. Year-over-year declines are not over - the 1986 levels in August, September, and December are most unlikely to be surpassed. The July results do indicate, however, that new car demand in Virginia is moving past the dampening effect of last year's surge in buying to a more normal level of demand.

Similarly, building permits statewide rose 10.3 percent in July, the first monthly increase since March. That still leaves the cumulative January-July dollar volume of permits 14.9 percent below the same period in 1986, so the current picture still is one of declining construction activity. But, the July increase supports our earlier prediction that Virginia construction activity in 1987 will not collapse, it merely will move to a more normal level below the 1986 peak. Zero or modestly positive increases in building permits in either August or September will add further confirmation of our outlook. As with new car sales, however, we do expect the monthly percentage changes for building permits will be negative periodically during the remaining months of the year as well as for the year as a whole.

The June nonagricultural employment figures showed a 2.7 percent year-over-year gain, continuing the pattern of decelerating growth. However, the June data also revealed an increase of 2,000 in manufacturing employment compared to June 1986, an encouraging sign that the anticipated upturn in Virginia's manufacturing employment has begun. Manufacturing job gains were realized in four of the state's eight metropolitan statistical areas: Richmond-Petersburg, Lynchburg, Danville, and Bristol. Therefore the upturn was fairly broadly based geographically, another encouraging sign. RLP

Chart I **Nine Selected Business & Economic Indicators Percentage Change**

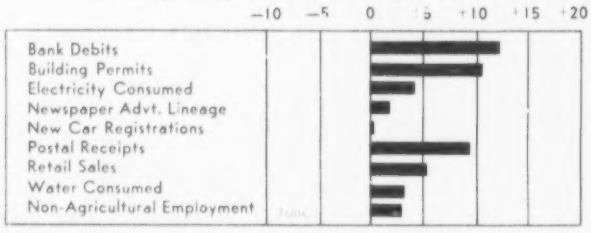
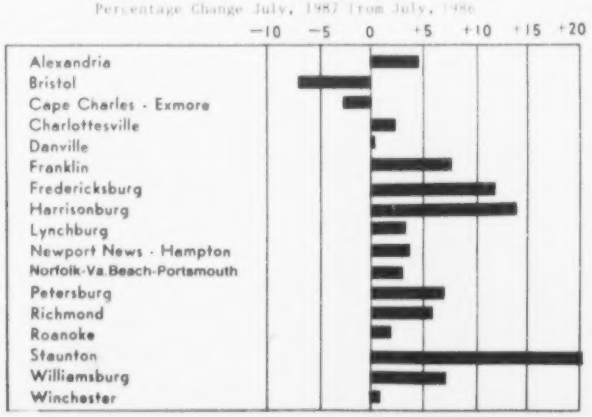


Chart II **City Indices**



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I July, 1987

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	June NON AGRI-CULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES†	POSTAL RECEIPTS
The State		228.6	203.0	171.5	105.2	349.0	311.6	115.6	176.9	137.7
Alexandria	155.6	488.7	133.8	197.5	N.A.	176.4	182.9	113.4	139.9	N.A.
Bristol	150.8	N.A.	191.4	96.9	72.1	124.4	117.3	103.3	127.5	460.8
Cape Charles - Exmore	118.6	N.A.	378.5	101.9	N.A.	102.4	N.A.	N.A.	129.5	N.A.
Charlottesville	196.8	150.0	102.4	155.8	N.A.	138.8	109.9	149.1	233.6	320.0
Danville	145.3	N.A.	88.2	139.5	N.A.	109.1	100.3	92.0	N.A.	285.6
Franklin	161.2	N.A.	176.4	152.6	103.6	126.2	N.A.	128.5	150.6	327.2
Fredericksburg	263.5	815.9	480.0	N.A.	177.3	257.0	N.A.	105.4	216.9	654.0
Harrisonburg	124.8	285.4	578.8	N.A.	126.8	116.1	N.A.	156.6	168.1	306.2
Lynchburg	223.8	378.8	241.2	131.7	N.A.	120.7	99.9	142.6	192.7	717.1
Newport News - Hampton	142.9	N.A.	174.8	155.0	90.8	110.9	136.6]	146.1	167.9	N.A.
Norfolk - Portsmouth	170.3	536.9	268.7	187.9	95.3	134.3		106.9	233.8	N.A.
Petersburg	112.3	151.3	81.4	N.A.	32.7	91.6	121.8]	123.2	139.0	N.A.
Richmond	171.2	479.9	N.A.	188.4	112.8	168.1		141.2	157.1	337.0
Roanoke	191.3	375.2	81.2	116.9	167.2	98.3	121.6	N.A.	169.4	518.5
Staunton	136.8	168.4	181.7	N.A.	N.A.	114.4	N.A.	N.A.	144.2	N.A.
Williamsburg	184.2	183.0	139.8	202.3	N.A.	197.3	N.A.	130.5	136.4	349.8
Winchester	170.3	388.7	425.7	145.9	203.0	162.1	N.A.	N.A.	N.A.	N.A.

TABLE II July, 1987

Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	June NON AGRI-CULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	June RETAIL SALES ‡
The State		12.6	10.3	4.2	1.7	0.2	2.7	3.1	5.1	13.0
Alexandria	4.5	39.5	-2.2	8.3	N.A.	9.3	4.0	4.7	-2.9	18.7
Bristol	-7.4	N.A.	481.9	-0.2	-11.5	-6.0	3.6	-21.8	-10.9	2.1
Cape Charles - Exmore	-2.6	N.A.	7.4	-32.5	N.A.	-9.4	N.A.	-12.8	8.2	12.2
Charlottesville	1.7	-46.4	-58.1	5.2	N.A.	-14.4	0.3	6.2	0.9	13.4
Danville	0.2	N.A.	-34.5	1.5	10.1	-9.8	1.0	-9.5	N.A.	7.6
Franklin	7.5	N.A.	123.0	7.7	9.9	-55.5	N.A.	10.9	27.4	4.7
Fredericksburg	11.5	12.6	-7.3	N.A.	16.4	15.4	N.A.	36.7	3.7	0.6
Harrisonburg	14.0	-3.4	-42.0	N.A.	6.4	-12.6	N.A.	22.8	21.7	16.1
Lynchburg	2.9	-14.4	34.6	6.0	N.A.	-2.3	2.1	1.5	5.6	-1.1
Newport News - Hampton	3.2	N.A.	35.7	3.1	8.2	-16.0	2.7]	-0.7	6.7	11.8
Norfolk - Va. Beach - Portsmouth	2.5	4.0	5.2	2.6	0.4	-3.5		3.3	4.5	3.9
Petersburg	7.1	0.0	-81.8	N.A.	4.8	-10.5	2.4]	7.4	14.0	10.4
Richmond	5.8	22.2	123.0	3.6	3.6	0.6		8.5	6.2	15.3
Roanoke	1.4	-17.0	-26.0	-0.8	2.9	-19.2	4.2	N.A.	5.3	6.5
Staunton	20.4	16.8	-57.8	N.A.	N.A.	0.0	N.A.	N.A.	32.4	4.7
Williamsburg	7.1	-3.9	-67.4	-0.1	N.A.	15.3	N.A.	-7.8	12.2	5.4
Winchester	0.4	29.7	205.4	9.3	4.5	-14.1	N.A.	N.A.	N.A.	1.8

TABLE III

Percentage Change January - July from same period last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	Jan.-June NON AGRI-CULTURAL EMPLOYMENT#	WATER CONSUMED	RETAIL SALES †	Jan.-June RETAIL SALES ‡
The State		15.2	-14.9	6.6	2.7	-6.0	3.5	-1.0	4.0	9.2
Alexandria	3.4	47.0	183.7	11.2	N.A.	-4.1	4.5	-0.7	1.8	10.8
Bristol	-2.4	N.A.	14.2	-1.1	-2.9	-14.8	3.5	8.8	-6.4	4.0
Cape Charles - Exmore	3.0	N.A.	-19.0	0.7	N.A.	-20.7	N.A.	9.8	5.8	13.5
Charlottesville	1.4	11.0	10.5	7.4	N.A.	-12.9	3.1	-1.4	1.3	10.7
Danville	0.2	N.A.	-30.1	5.2	5.1	-15.6	1.0	5.1	N.A.	0.1
Franklin	4.0	N.A.	-35.7	7.6	5.3	-28.4	N.A.	1.3	1.6	41.6
Fredericksburg	8.3	47.7	159.7	N.A.	13.4	-1.8	N.A.	8.1	7.7	15.1
Harrisonburg	4.2	-3.9	32.0	N.A.	2.5	-11.8	N.A.	6.0	5.2	17.3
Lynchburg	2.1	-11.3	32.8	5.0	N.A.	-10.9	1.9	7.3	1.8	8.3
Newport News - Hampton	2.1	N.A.	-36.5	3.9	7.2	-5.6	2.5]	-5.5	2.8	8.1
Norfolk - Va. Beach - Portsmouth	3.4	30.4	-28.3	3.7	0.7	-0.4		1.5	6.1	4.7
Petersburg	3.8	-15.2	-39.5	N.A.	N.A.	-8.9	3.3]	4.0	6.6	8.1
Richmond	3.0	16.7	29.9	6.9	4.5	-2.5		-2.8	2.1	11.4
Roanoke	-0.3	-16.0	7.0	0.5	-2.5	-18.3	2.9	N.A.	5.1	0.0
Staunton	11.3	10.6	32.7	N.A.	N.A.	-17.9	N.A.	N.A.	21.9	8.7
Williamsburg	5.1	22.4	-66.2	6.6	N.A.	-11.1	N.A.	-3.2	9.8	14.1
Winchester	1.3	10.5	401.5	5.4	N.A.	-16.2	N.A.	N.A.	N.A.	14.8

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.

#Virginia Employment Commission data which lags behind current reports.

†Preliminary data based on a survey sample.

‡Revised data based on sales tax information which lags behind current reports.

]Only total MSA data are available for these areas

N.A. — Not Available
0.0 — No Change

Virginia Travel, 1986

The U.S. Travel Data Center and the Virginia Division of Tourism annually prepare an economic analysis of travel in Virginia during the preceding year, showing the total travel expenditures and the payroll, jobs and tax receipts directly generated by travel in the Commonwealth and in each city and county. "Travel in Virginia, 1986" now is available, so this month's commentary we will review a few of the highlights and add some observations of our own.

Total travel expenditures in Virginia were an estimated $6,102 million in 1986, directly generating $1,372 million in wages and salaries for 137,807 workers. That is big business. The Virginia travel industry also was a growth star in 1986. Total travel expenditures jumped 15.0 percent compared to 1985, far above the growth in general retail sales. Travel employment increased by 9.9 percent from 1985 to 1986, more than twice the overall state growth of 4.2 percent. Similarly, the travel-generated payroll of $1,372 million was 17.3 percent higher than the 1985 level, compared to an 8.9 percent gain in total Virginia wages and salaries, almost a 2 to 1 ratio.

We calculated the percentage changes in travel expenditures for each city and county, the groups of localities in the Commonwealth's eight metropolitan statistical areas (MSAs), plus the groupings for the 20 Labor Market Areas (LMAs) which are non-MSA market area designations defined by the Virginia Employment Commission (listed in their monthly publication, "Labor Force Estimates"). The growth rates reveal a clear pattern when the localities are grouped by interstate corridors.

Table IV shows the growth rates for the MSAs, LMAs, and independent counties along three corridors: Interstate 95, north to south from the Northern Virginia MSA through the Emporia LMA; Interstate 81, from the Winchester LMA down the Shenandoah Valley into the Virginia highlands, ending with the Bristol MSA; and the Interstate 64 corridor, west to east from the Covington LMA to the Norfolk-Virginia Beach-Newport News MSA but excluding the areas already included as part of the other two corridors.

The I-95 corridor clearly was the focal point of Virginia's travel growth in 1986. The average growth rate in travel expenditures along this corridor was 23.4 percent, and the only segment under 20 percent was the Richmond-Petersburg MSA at 16.0 percent.

The second focus for Virginia tourism growth was the I-81 corridor. Here the average travel increase was 13.1 percent. The northern anchor, the Winchester LMA, had outstanding growth of 35.1 percent, matched by the Bristol MSA's 35.2 percent at the southern end. Growth generally was higher in the northern portion then lower through the Lexington, Roanoke, and Radford areas.

The remaining areas of the state averaged 1985-1986 travel growth of only 7.7 percent, well below the average statewide growth rate of 15 percent. Therefore the patterns show a clear dominance of 1986 travel growth by the I-95 and I-81 corridors.

Interstate 64 is the major east-west artery across the Commonwealth. From east to west, the I-64 corridor not contained in the I-95 or I-81 corridors begins with the Atlantic Ocean beaches in Virginia Beach and continues through Williamsburg, all within the Norfolk-Virginia Beach-Newport News MSA; after skipping over Richmond, proceeds through Louisa County and the historic areas in the Charlottesville MSA to the Blue Ridge Mountains in Nelson County; then skips the I-81 corridor to the Covington LMA and the West Virginia border. Tourism growth along this I-64 corridor generally was well below the state average. As shown in Table IV the corridor average gain was 6.9 percent, ranging from the 7.4 percent in the Norfolk-Virginia Beach-Newport News MSA to 0.9 percent in the Charlottesville MSA and a decline of 1.8 percent in the Covington LMA.

The Corridor analysis shows where the travel and tourism growth occurred. That analysis plus a review by individual city and county offers some insights

TABLE IV TRAVEL EXPENDITURES IN VIRGINIA

	1986 Travel Expenditures ($000)	Percent Change 1985-1986
Interstate 95 Corridor		
Northern Virginia MSA	$1,682,127	26.7%
Fredericksburg LMA	82,560	28.4
Caroline County	17,273	32.4
Richmond-Petersburg MSA	475,990	16.0
Sussex County	1,929	32.0
Emporia LMA	18,212	20.8
Total, I-95 Corridor	$2,259,846	23.4%
Interstate 64 Corridor, Not Elsewhere Included		
Covington LMA	$ 12,475	-1.8%
Nelson County	44,308	7.0
Charlottesville MSA	84,323	0.9
Louisa County	4,577	6.8
Norfolk-Virginia Beach Newport News MSA	1,357,459	7.4
Total, Rest of I-64 Corridor	$1,503,162	6.9%
Interstate 81 Corridor		
Winchester LMA	$ 39,137	35.1%
Shenandoah County	42,129	15.7
Warren County	18,843	8.4
Page County	22,601	-4.1
Harrisonburg LMA	56,823	17.9
Staunton-Waynesboro LMA	54,318	17.6
Buena Vista LMA	28,316	5.2
Roanoke MSA	188,572	7.7
Radford LMA	56,827	6.6
Wythe County	31,385	22.9
Smyth County	11,578	-1.7
Bristol MSA	45,510	35.2
Total, I-81 Corridor	$596,039	13.1%
Virginia, Grand Total	$6,102,020	15.0%

into the nature of the travel industry growth. All market segments of Virginia's travel industry appear to have grown substantially: out-of-state tourists, business travel, within-state resident travel, and Virginians to out-of-state destinations. However business travel expenditures, particularly in Northern Virginia and the Richmond-Petersburg MSAs, seem to have increased much more rapidly than tourist travel spending. For example, compare the growth rates in business transit areas such as Loudoun County, +52.5 percent, and Richmond, +30.2 percent, with the rates for more tourist oriented areas such as the Williamsburg-James City County-York County historic triangle, +11.1 percent, Albermarle County, +7.1 percent, the City of Virginia Beach, +6.7 percent, and Bath County, +1.9 percent.

Among tourist travel segments, within-state resident travel expenditures displayed the lowest growth. One reason was the spending on travel services by Virginians to out-of-state destinations rose quite strongly, by 14.7 percent. Virginia personal income per capita has risen dramatically in recent years, rising from 96 percent of the national average in 1979 to 105 percent in 1986, reaching a level of $15,408 per person. That higher income has broadened Virginian's travel options, evidently producing more rapid growth in their out-of-state travel than in-state.

In sum, all types of Virginia travel grew substantially in 1986, but there were some significant differences among market groups. The business traveler currently seems to be assuming an increasing importance; but, that can be a highly cyclical market. The Commonwealth has continued to increase its share of the total U.S. travel market, competing effectively with other states. We are facing, however, increasing competition from other states for the pleasure traveler, not only for non-Virginians but especially for our own increasingly prosperous Virginians. RLP

To the Readers of the *Virginia Business Report* and Friends of Dr. Roy Pearson:

We at the School of Business Administration thought you would like to receive the notice that Roy has been named a Chancellor Professor by Chancellor Warren Burger and the William and Mary Board of Visitors.

John C. Jamison
Dean

The
School of Business Administration
of
The College of William and Mary in Virginia

is pleased to announce
that

Dr. Roy L. Pearson

has been named

Chancellor Professor
of
Business Administration

Williamsburg, Virginia
August 15, 1987

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Roy L. Pearson, Director, Bureau of Business Research
John C. Jamison, Dean, School of Business Administration

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 325 **September, 1987**

Business in Virginia August, 1987 Data

New car registrations in Virginia plunged in August compared to August of 1986, a drop of 16.0%. Decreases were recorded in 15 of the 17 urban areas we cover. The only exceptions were Winchester, unchanged, and Staunton, up 3.8%. New car buying this August, as expected, was well below the astronomically high levels of 1986. The same almost certainly will be true for September — look for another decline of 8 to 10%.

Building permits statewide rose in August, up 7.5% compared to a year ago. As we explained last month, "zero or modestly positive increases in building permits in either August or September will add further confirmation of our outlook" that Virginia construction activity is not collapsing, it merely is moving to a more normal level below the 1986 peak. The cumulative change in building permits, January — August, now stands 12.4% below the level for the same period last year, a rather modest decline for such a volatile, cyclical industry. Further declines can be expected, however, during the fourth quarter.

The full impact of the drop in permits has not yet been felt. Construction employment growth in Virginia has decelerated, but in July still was 3.1 percent above last July. Look for construction as well as related industries to show the effects of less building activity in the coming quarters.

Both electricity consumed and water consumed showed stronger gains in August, statewide as well as in several metropolitan areas. That tandem move, coupled with June and July's solid increases in manufacturing employment, is a sign that Virginia's manufacturing activity is continuing to rebound. Further manufacturing job gains, especially in nondurable goods industries, should be realized in the coming months.

The area for some concern is retail trade (other than automobiles). Our sample of retail stores reported decelerating growth in July and now a decline in August. The back-to-school buying season was delayed somewhat by the late Labor Day, so September should reveal a return to year-over-year gains. Virginians, however, are overdue in moving to lower growth in their retail spending. Total taxable sales have been growing recently at almost twice the growth rate for residents' income. We expect to see more modest growth in total taxable sales in the coming months.

August did not produce strong, across-the-board growth in Virginia or most of its urban areas. Staunton was the only clear star, with strong increases in retail sales, building permits, total spending (bank debits) and even a gain in new car sales. Winchester experienced more modest but broadly based growth, keeping the growth spotlight on Shenandoah Valley communities.

RLP

Chart I

Nine Selected Business & Economic Indicators Percentage Change

Percentage Change August, 1987 from August, 1986

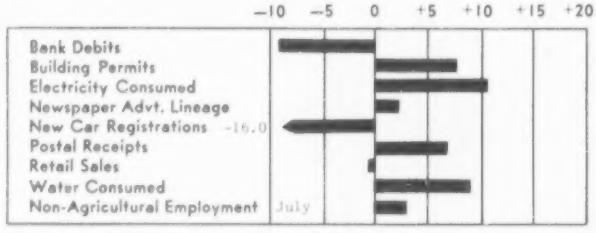
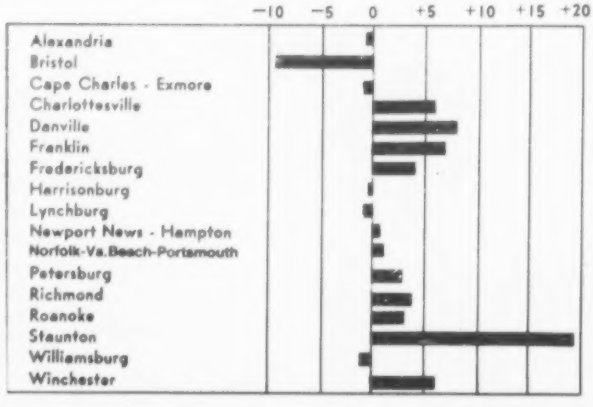


Chart II

City Indices

Percentage Change August, 1987 from August, 1986



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Alexandria	160.4	412.7	151.2	209.1	N.A.	135.9	185.0	116.1	158.9	N.A.
Bristol	128.3	N.A.	69.4	105.7	73.2	91.5	114.2	128.3	125.3	266.0
Cape Charles - Exmore	134.7	N.A.	239.6	170.7	N.A.	94.3	N.A.	N.A.	120.8	180.9
Charlottesville	190.1	164.0	590.3	163.5	N.A.	145.7	104.2	153.8	215.1	308.1
Danville	129.8	N.A.	117.9	129.7	124.0	106.6	96.0	94.2	N.A.	228.1
Franklin	149.0	N.A.	97.8	148.1	122.3	154.1	N.A.	118.2	135.6	242.4
Fredericksburg	380.8	199.7	98.1	N.A.	169.7	201.6	N.A.	100.6	245.1	1458.7
Harrisonburg	163.3	251.1	228.0	N.A.	150.9	90.9	N.A.	148.9	150.4	301.0
Lynchburg	233.3	371.6	92.1	139.7	N.A.	98.6	96.0	105.5	180.8	883.8
Newport News - Hampton	155.2	N.A.	286.9	161.3	99.3]	111.2	139.4]	145.9	194.8	N.A.
Norfolk - Va. Beach - Portsmouth	148.0	118.1	196.5	206.2		117.5		101.7	222.7	N.A.
Petersburg	124.2	151.8	191.3	N.A.	25.8	94.0	128.0]	122.9	128.6	237.3
Richmond	160.1	284.4	985.0	200.0	126.8	131.5		136.4	134.4	315.1
Roanoke	161.8	340.7	100.7	127.0	166.2	87.7	125.5	128.2	159.1	344.5
Staunton	158.7	168.2	198.4	N.A.	86.7	181.5	N.A.	N.A.	154.5	220.4
Williamsburg	179.8	173.7	288.0	212.0	N.A.	156.8	N.A.	126.8	140.1	342.6
Winchester	177.1	353.8	123.1	146.7	242.0	142.6	N.A.	N.A.	N.A.	N.A.

TABLE II August, 1987

Percentage Change from same month last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	July NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	July RETAIL SALES ‡
The State		-9.0	7.5	10.6	2.3	-16.0	2.9	9.1	-0.2	11.8
Alexandria	-8.0	18.9	-75.8	12.7	N.A.	-23.1	3.7	12.2	-7.7	11.3
Bristol	-9.7	N.A.	-5.4	4.8	-18.6	-34.7	6.1	-9.5	-8.9	-8.9
Cape Charles - Exmore	-1.5	N.A.	-32.3	7.1	N.A.	-31.8	N.A.	-14.5	4.1	16.1
Charlottesville	5.6	-43.2	382.3	15.9	N.A.	-2.6	1.2	15.1	0.7	13.5
Danville	7.8	N.A.	-15.4	19.3	1.9	-1.0	2.4	17.0	N.A.	7.0
Franklin	6.7	N.A.	-7.4	13.7	3.4	-38.6	N.A.	19.5	12.8	16.9
Fredericksburg	4.6	18.0	-0.9	N.A.	9.3	-9.3	N.A.	32.2	-0.5	1.8
Harrisonburg	-0.2	-19.6	19.5	N.A.	12.4	-31.6	N.A.	-0.1	0.6	16.2
Lynchburg	-1.5	0.6	-62.2	7.9	N.A.	-3.5	1.2	-15.5	0.9	-4.9
Newport News - Hampton	0.8	N.A.	-15.1	7.8	5.4]	-15.9	2.3]	3.8	-1.5	8.7
Norfolk - Va. Beach - Portsmouth	1.0	6.5	-3.6	8.5		-14.1		8.0	-2.6	6.3
Petersburg	2.6	-4.6	-22.4	N.A.	-17.3	28.7	4.0]	6.2	0.0	-1.2
Richmond	3.7	-11.2	348.3	11.6	3.5	-9.3		17.0	-1.9	12.0
Roanoke	3.1	-20.3	-24.5	7.9	-0.3	-19.0	4.4	13.4	6.9	0.6
Staunton	19.8	25.9	303.7	N.A.	-1.6	3.8	N.A.	N.A.	30.2	26.0
Williamsburg	-1.2	-3.0	-38.8	4.2	N.A.	-21.3	N.A.	-8.6	-5.5	33.5
Winchester	5.8	3.8	44.8	5.9	3.5	0.0	N.A.	N.A.	N.A.	13.8

TABLE III

Percentage Change January - August from same period last year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV LINAGE	NEW CAR REGIS-TRATIONS	Jan.-July NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	Jan.-July RETAIL SALES ‡
The State		12.7	-12.4	7.1	2.7	-7.4	3.4	0.3	3.5	9.5
Alexandria	3.1	43.1	76.1	11.4	N.A.	-7.0	4.3	1.0	1.4	10.8
Bristol	2.4	N.A.	11.9	-0.4	5.2	-18.0	3.9	5.5	-6.8	2.4
Cape Charles - Exmore	2.3	N.A.	-20.7	1.7	N.A.	-22.6	N.A.	6.5	5.5	13.9
Charlottesville	1.8	3.3	36.9	8.5	N.A.	-11.6	2.2	0.8	1.2	11.0
Danville	1.1	N.A.	-28.6	7.0	4.7	-13.6	1.2	6.5	N.A.	1.0
Franklin	3.1	N.A.	-34.3	8.4	5.1	-30.2	N.A.	3.5	-0.3	38.7
Fredericksburg	7.8	43.4	150.0	N.A.	12.9	-2.9	N.A.	11.5	6.5	13.3
Harrisonburg	3.8	-6.1	31.4	N.A.	3.8	-14.6	N.A.	6.4	4.6	17.2
Lynchburg	0.1	-10.1	15.6	5.4	N.A.	-10.0	1.7	-8.4	1.7	6.7
Newport News - Hampton	1.5	N.A.	-34.5	4.5	3.5]	-7.2	2.4]	-4.3	2.1	8.2
Norfolk - Va. Beach - Portsmouth	3.3	29.1	-26.3	4.4		-2.3		2.4	4.8	4.9
Petersburg	3.9	11.5	-37.9	N.A.	N.A.	-4.6	3.5]	4.3	5.7	6.8
Richmond	3.1	13.7	73.7	7.6	4.4	-3.4		-0.1	1.5	11.5
Roanoke	0.0	-16.6	0.4	1.5	-2.2	-18.4	3.1	0.1	5.3	0.1
Staunton	12.8	12.5	47.5	N.A.	N.A.	-15.0	N.A.	N.A.	22.7	10.9
Williamsburg	4.1	18.9	-60.9	6.2	N.A.	-12.7	N.A.	-4.1	7.4	16.8
Winchester	1.9	-29.6	372.7	5.5	N.A.	-14.3	N.A.	N.A.	N.A.	14.6

*Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
#Virginia Employment Commission data which lags behind current reports.
†Preliminary data based on a survey sample.
‡Revised data based on sales tax information which lags behind current reports.
] Only total MSA data are available for these areas

N.A. — Not Available
0.0 — No Change

The Summer of 1987 – Job Growth In Virginia

Frequently this year we have commented on the decelerating growth of payroll jobs in Virginia. This month we are providing a more detailed picture of recent experience, using the average employment figures for the latest two months available, June and July. Table IV shows the percent changes in nonagricultural employment from the summer (June-July) of 1986 to the summer of 1987, by geographical areas and nine industry groups plus the overall state. The data confirm that, this summer, payroll jobs have grown compared to last summer in nearly every area and industry sector. By area, only the Charlottesville MSA has recorded a decline in nonagricultural employment (we checked that with the Virginia Employment Commission. Data revisions since our August report have turned a small summer gain into a decline there). Northern Virginia remains a growth leader, but both Bristol and Roanoke have had higher job growth rates this summer. Plus, the Richmond-Petersburg MSA's percentage gain is very close to that of Northern Virginia — the latter area is no longer the dominant leader on a percentage change basis.

By industry, construction job growth has gone from superstar status last year to below average this summer, less than the state's overall percentage gain. That has been the predicted sequel to the declining building permits this year, and construction employment statewide should actually drop in the coming months.

TABLE IV Nonagricultural Employment Growth Rates, Summer 1986 to Summer 1987

Area	Total Non-Agricultural Employment	Durable Goods Manufacturing	Nondurable Goods Manufacturing	Construction	Transportation and Public Utilities	Wholesale and Retail Trade	Finance Insurance and Real Estate	Services	Federal Government	State and Local Government
The State	2.8	-0.7	1.7	2.7	3.9	4.3	4.8	3.6	0.8	2.2
Nonmetro Areas	2.0	1.1	2.4	11.3	-0.5	4.8	1.7	1.4	-6.5	-0.8
Sum of MSAs	3.1	-1.7	1.1	-0.2	5.1	4.1	5.2	4.2	1.7	3.3
Northern Virginia	3.8	-6.2	3.6	0.4	10.5	3.3	7.3	3.5	2.0	7.1
Bristol	4.8	7.1	3.3	-11.1	9.1	6.8	0.0	1.1	0.0	9.9
Charlottesville	-1.4	-2.6	0.0	6.8	7.1	0.8	1.6	0.9	0.0	-6.4
Danville	1.7	1.6	4.6	-13.3	0.0	0.0	-8.3	-1.8	0.0	6.7
Lynchburg	1.6	3.0	2.4	1.5	0.0	2.7	3.0	1.8	0.0	-2.7
Hampton Roads	2.4	-6.0	-0.3	-4.9	0.8	6.3	3.4	5.7	1.0	1.0
Richmond/Petersburg	3.5	8.6	-0.2	4.2	2.7	0.9	5.6	6.1	2.7	4.5
Roanoke	4.4	0.0	0.0	4.9	-2.2	11.6	3.7	0.4	1.5	7.5

TABLE V Direction of Growth Rate Changes in Virginia Nonagricultural Employment For Summer 1986-1987 Rates Versus Summer 1985-1986 Rates[a]

Area	Total Non-Agricultural Employment	Durable Goods Manufacturing	Nondurable Goods Manufacturing	Construction	Transportation and Public Utilities	Wholesale and Retail Trade	Finance Insurance and Real Estate	Services	Federal Government	State and Local Government
The State	DG	F	AG	DG	AG	DG	DG	DG	S	SG
Nonmetro Area	DG	DG	AG	SG	F	DG	DG	DG	[illegible]	F
Sum of MSAs	DG	AF	AG	F	AG	DG	DG	DG	G	AG
Northern Virginia	DG	G	DG	DG	AG	DG	DG	DG	G	AG
Bristol	AG	G	SG	DF	AG	DG	ZG	DG	ZG	AG
Charlottesville	F	DF	ZG	AG	G	DG	DG	DG	ZG	F
Danville	G	DG	G	AF	ZG	ZG	F	F	ZG	AG
Lynchburg	AG	G	G	DG	ZG	G	G	DG	ZG	F
Hampton Roads	DG	F	F	F	DG	AG	DG	AG	G	DG
Richmond/Petersburg	AG	G	SF	DG	AG	DG	AG	DG	SG	G
Roanoke	AG	ZG	ZG	AG	SF	AG	DG	DG	SG	G

[a]See text for definition of categories of change.

Services also are reporting much more moderate job growth this summer, only 3.6% above last summer's level. The wholesale and retail trade growth rate is a bit higher than that at 4.3%. But, only a year ago both of these industry sectors were growing at better than a 6% pace. None of the nine industry sectors are growing statewide at even 5%.

Table IV gives the growth rates, but as usual any analysis quickly moves to whether or not the job growth is decelerating. Therefore we constructed Table V, with coded entries to describe the direction of the changes (if any) in the growth rates. The entries were determined by comparing the 1986-1987 summer growth rates to the 1985-1986 summer rates. A nine-category classification scheme was developed to describe the direction in which a growth rate was moving. These nine categories are described below.

Four categories relate to positive growth rates. AG: An Accelerating (larger positive) growth rate. SG: Steady (same) growth rate. DG: Decelerating (smaller positive) growth rate. G: Switched from a negative to a positive rate.

In addition to these four, the ZG category identifies any zero growth rate (or below 0.3%) for 1986-1987. The previous year's rate could be either positive, zero, or negative. The 'DF' label relates to another rather special type of change, a decelerating rate of decline. No decline is desirable; but, if the rate of decline is getting smaller then that sector is becoming less of a drag on the total results.

There are three additional categories related to declining job levels. F: Switched from growth to a decline. SF: Steady (same) rate of decline. AF: Accelerating rate of decline (higher negative).

Each of the 110 growth rates in Table IV were compared to the growth rates for summer 1985 -- summer 1986 (not shown here), and the resulting classifications for the direction of change in each growth rate are reported in Table V. The table may look like a set of genetic codes to some. In a sense it is — the set of classifications do provide insights about the future rate and type of growth for Virginia's economy.

Let us explore how to use the table, with some examples of the insights it offers. First, just a quick scan reveals that DG entries, indicating decelerating growth rates, are the most numerous of the nine classifications (actually, 37 of the 110). Decelerating growth is indeed occurring widely, across areas and industries. The DGs are especially prominent in three of the columns: wholesale and retail trade, FIRE, and services. For the services industry column, 9 of the 11 entries are DG; in addition, one is an F, noting a switch from growth to a decline. Therefore 10 of the 11 entries point to lower growth in the services sector. Trade and services clearly are not the likely sources of future new strength in Virginia's job growth.

What are the promising sources of new strength? A good indication comes from picking out three types of classifications: AG, the accelerating growth sectors (22 total count); G, where a decline has switched to an increase (15 entries); and the DFs, where the rate of decline is getting smaller, exerting less drag (only 3 of these). Looking at the industry columns, the transportation and public utilities industry stands out: 5 AGs including the state total (row 1) plus 1 G. This is a large industry, with over 5% of the state's total payroll employment, and as shown in Table IV its recent growth rate is 3.9%, well above the state average. Therefore this industry definitely deserves monitoring as an important and rising source of economic strength.

Another private sector industry with significant signs of an increasing contribution is nondurable goods manufacturing, with AG classifications for the state, the nonmetropolitan areas, and the sum of the MSAs. The nonmetro strength is not directly identifiable, but the current metropolitan strength is related to the improvements (the two Gs) in Danville and Lynchburg. The statewide acceleration strongly reflects the accelerating growth in two specific nondurable goods manufacturing industries, food and textiles.

A third source of current new strength is in the public sector, state and local government employment. That column shows 4 AG entries and 2 Gs. Neither the size of the recent statewide growth rate (2.2%) nor the strength of its acceleration is impressive. However, the direction of changes in the overall and area growth rates is an indication that more strength may come from state and local government job growth in the future.

Column 1 contains the growth rate designations by area of the state. A brief review shows 4 of Virginia's 8 MSAs are experiencing accelerating job growth: Bristol, Lynchburg, Richmond-Petersburg, and Roanoke. As noted earlier, Bristol and Roanoke currently are the leaders in growth rate, and any further acceleration in the Richmond-Petersburg MSA will move its rate past Northern Virginia. For Richmond-Petersburg, the sources of its acceleration are revealed by reading across the table: accelerating growth in the transportation/public utilities and FIRE sectors and a switch from decline to growth in durable goods manufacturing and state and local government jobs.

In sum, a classification by industry and area of the direction of changes in growth rates has proved useful to us in assessing Virginia's probable strengths and weaknesses in future job growth. We hope you find it helpful in developing your own perspective. RLP